



ISOLATES FROM HOSTS IN **COLEOPTERA**

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[INCLUDES 1555 ISOLATES]

USDA-ARS Biological Integrated Pest Management Research
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IMPORTANT NOTE

Major new classifications for fungal pathogens of invertebrates and new nomenclatural rules

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UPDATED March 2012

Some seemingly dramatic and comparatively recent changes in the classification of a number of fungi may continue to cause confusion or a degree of discomfort to many of the clients of the cultures and informational resources provided by the ARSEF culture collection. This short treatment is an attempt to summarize some of these changes, the reasons for them, and to provide the essential references to the literature in which the changes are proposed.

As the Curator of the ARSEF collection I wish to assure you that these changes are appropriate, progressive, and necessary to modernize and to stabilize the systematics of the fungal pathogens affecting insects and other invertebrates, and I urge you to adopt them into your own thinking, teaching, and publications.

The identifications in the ARSEF catalogs (<http://www.ars.usda.gov/Main/docs.htm?docid=12125>) incorporate these new classifications as soon as we can confirm the correct new identifications of fungi and, where genera or species are being split on molecular grounds, to determine and to apply the correct new identifications.

General Reclassification of Fungi

The results of a global cooperative effort involving dozens of mycologists (including the curator of this collection) to reclassify the fungi according to phylogenetically sound principles based on the DNA sequence data for multiple genes has recently resulted in the publication of two monumentally important publications that completely rework mycological systematics. The earlier publication was a phylogenetic overview of virtually all fungi (James *et al.* 2006). The second publication (Hibbett *et al.* 2007) provided the necessary taxonomic readjustments that were indicated by the phylogenetic studies.

Microsporidia

Many mycologists and invertebrate pathologists are now aware that the Microsporidia have been proven beyond any reasonable doubt to be comparatively recent and highly derived endobiotic fungi. They are neither extremely ancient eukaryotes nor affiliated with protozoans as most textbooks indicate. None of this realignment to the fungi is being disputed by either microsporidiologists or phylogenetic mycologists. The rationale for this realignment is presented succinctly in James *et al.* (2006). These fascinating organisms connect to the fungal tree of life at the base of the nonflagellate fungi (among or near the fungi traditionally treated as the Zygomycota) but their exact affinities and nearest remain uncertain.

Zygomycota, Zygomycotina, Zygomycetes and Entomophthorales

The phylogenetic reclassification of fungi (Hibbett *et al.*, 2007) significantly modified the traditional view of the most ancestral nonflagellate fungi. The phylum Zygomycota, subphylum Zygomycotina, and class Zygomycetes disappeared in their widely understood sense to be replaced by the phylum Glomeromycota (for arbuscular mycorrhizal fungi) and a series of new subphyla not yet assigned to any phylum (because of the obviously polyphyletic nature of the zygomycetes as traditionally treated). The Entomophthorales is reclassified in the subphylum Entomophthoromycotina Humber (in Hibbett *et al.* 2007); the other new subphyla in this group are the Mucoromycotina (which was incorrectly given in previous catalogs as 'Mucormycotina'), Zoopagomycotina and Kicxellomycotina. Where there had been some question about whether *Basidiobolus* and its close relatives should

be retained in the Entomophthorales or moved to a position closer to some of the blastocladialean watermolds, James *et al.* (2006) unequivocally retain *Basidiobolus* in an ancestral position in the Entomophthorales, and all of these fungi have now been shown to represent a monophyletic group that is distinct from all other zygomycetous fungi. Humber (2012) described a new phylum, Entomophthoromycota, for these fungi, recognized three classes in this phylum: Basidiobolomycetes (for Basidiobolales and Basidiobolaceae), Neozygitomycetes (for the new order Neozygitales and previously described family Neozygitaceae), and Entomophthoromycetes (Entomophthorales, now restricted to Acanthostichaceae, Completoziaceae, Entomophthoraceae, and Meristacraceae). The genera *Ballocephala* and *Zygnemomyces* were removed from Entomophthorales to the Kickxellomycotina because these fungi have plugged, bifurcate septa characteristic of that subphylum.

Entomopathogenic Ascomycetes and Associated Anamorphic (Conidial) States

Among all of the major taxonomic changes within the fungi that affect entomopathogenic fungi, the most dramatic and far-reaching involve the ascomycetes and their conidial (anamorphic) states classified among the pyrenomycetous fungi of the order Hypocreales. In one of the first major changes to be noted, those ascomycetous entomopathogens whose ascospores are produced in perithecia (nearly closed spherical to flask-like fruiting bodies) are now put in the class Sordariomycetes, a name based on a valid generic name, rather than in the historically familiar class Pyrenomycetes, a name based on the morphology of the fruiting body. The great majority of these fungi have long been recognized to belong in the family Clavicipitaceae (mostly in the genera *Cordyceps*, *Torrubiella* or *Hypocrella*). A major phylogenetic reclassification of the Clavicipitaceae (Sung *et al.* 2007; available free of charge at <http://www.studiesinmycology.org>) has split this family into three (Table 1), a long overdue major reworking of the taxonomy of *Cordyceps* and, subsequently, a reshuffling of anamorphic states among these families. This publication by Sung *et al.* (2007) is very long and complex since it includes a highly detailed phylogenetic analysis of these fungi as well as presenting the new taxonomy, descriptions of new families, genera, and species, and a very large number of new combinations (mostly segregating *Cordyceps* into their newly described segregate genera), and listing of the known or suspected anamorphic states associated with these taxa.

Note that Table 1 shows *Torrubiella* to be split between two families. This is an untenable position in a phylogenetically based classification that requires all taxa to represent monophyletic lineages. Future phylogenetic studies that will result in the reclassification of *Torrubiella* are obviously required. Also note that some anamorphic states with morphologies referable to *Hirsutella*, *Paecilomyces* and *Verticillium* (the latter

Table 1. Summary of some major teleomorphic (sexual) and anamorphic (conidial) genera of Hypocreales pathogenic to invertebrates (Sung *et al.* 2007).

	FAMILY		
	Clavicipitaceae	Cordycipitaceae	Ophiocordycipitaceae
Teleomorphs:	<i>Hypocrella</i> , <i>Metacordyceps</i> , <i>Regiocrella</i> , <i>Torrubiella</i>	<i>Cordyceps</i> s.str., <i>Torrubiella</i>	<i>Ophiocordyceps</i> , <i>Elaphocordyceps</i>
Anamorphs:	<i>Aschersonia</i> , <i>Metarhizium</i> , <i>Nomuraea</i> , <i>Paecilomyces</i> -like ¹ , <i>Pochonia</i> , <i>Rotiferophthora</i> , <i>Verticillium</i> -like ²	<i>Beauveria</i> , <i>Engyodontium</i> , <i>Isaria</i> , <i>Lecanicillium</i> , <i>Mariannaea</i> -like, <i>Microhilum</i> , <i>Simplicillium</i>	<i>Haptocillium</i> , <i>Harposporium</i> , <i>Hirsutella</i> , <i>Hymenostilbe</i> , <i>Paraisaria</i> , <i>Purpureocillium</i> <i>Sorosporella</i> , <i>Syngliocladium</i> , <i>Tolyphocladium</i> , <i>Verticillium</i> -like ²

¹ Species formerly in *Paecilomyces* sect. *Isarioidea*, now excluded from *Paecilomyces* in the strict sense but also from *Isaria* (which now includes most entomogenous species transferred from *Paecilomyces*).

² Species formerly in *Verticillium* sect. *Prostrata*, now excluded from *Verticillium* in the strict sense but not yet reclassified in the segregate genera recognized by Zare and Gams (see below).

Table 2. Publications eliminating and reclassifying *Verticillium* section *Prostrata*

PART	AUTHORS	SUBJECT COVERED
1	Zare, Gams & Culham (2000)	ITS sequence analyses
2	Sung, Spatafora <i>et al.</i> (2001)	SSU, LSU rDNA sequence analyses
3	Gams, Zare (2001)	Generic reclassification
4	Zare, Gams (2001)	<i>Lecanicillium</i> and <i>Simplicillium</i> monograph
5	Zare, Gams, Evans (2001)	<i>Pochonia</i> , <i>Rotiferophthora</i> monograph
6	Zare, Gams (2001)	<i>Haptocillium</i> monograph

Table 3. Current phylogenetically based classification within Hypocreales of some species formerly classified in *Paecilomyces* sect. *Isarioidea* (following Luangsa-ard *et al.* 2005; Sung *et al.* 2007; Luangsa-ard *et al.* 2011)

FAMILY	GENUS	INCLUDED SPECIES
Clavicipitaceae	' <i>Paecilomyces</i> ' ¹	<i>carneus</i> , <i>marquandii</i>
Cordycipitaceae	<i>Isaria</i>	<i>amoenorosea</i> , <i>cateniannulata</i> , <i>catenobliqua</i> , <i>cicadae</i> , <i>coleopterora</i> , <i>farinosa</i> , <i>fumosorosea</i> , <i>ghanensis</i> , <i>tenuipes</i>
Ophiocordycipitaceae	<i>Purpureocillium</i>	<i>lilacinum</i> (<i>syn.</i> : <i>Paec. lilacinus</i>)

¹ No generic re-assignments have been made for these hypocrealean anamorphs that continue (for lack of better alternatives) to be treated provisionally as *Paecilomyces* species. The generic affinities of other excluded '*Paecilomyces*' species noted by Luangsa-ard *et al.* (2005) remain uncertain.

two genera in their old senses from before recent phylogenetic reclassifications discussed below may occur in more than one family; this underscores the need to regard anamorphic states as being named in form-genera defined only by their morphologies and similar modes of development rather than by phylogenetic relatedness.

Phylogenetically based reclassification of *Verticillium* section *Prostrata* – The extensive, phylogenetically based reclassifications of conidial fungi that common pathogens of insects or other invertebrates began with the reclassification of *Verticillium* species. The venerable classification of this genus (Gams 1971) recognized the sections *Verticillium* and *Prostrata*. All species in *Verticillium* sect. *Verticillium*, which included the phytopathogens with well differentiated, erect conidiophores, are anamorphs of perithecial ascomycetes in the order Phyllachorales. The species in *Vert.* sect. *Prostrata*, however, were anamorphs attributable to the order Hypocreales (Sordariomycetes). Because the current systematics practices recognize monophyletic taxa, it was necessary to remove the species from *Verticillium* section *Prostrata* to other genera. This reclassification was done in six publications (Table 2) reflecting primarily the doctoral research of Rasoul Zare under the guidance of Walter Gams. Most entomopathogens from this group are now placed in *Lecanicillium*, a genus whose type species, *L. lecanii*, was also recognized to be a species complex recognized to include at least three species (*L. lecanii*, *L. muscarium*, and *L. longisporum*) and thus replacing the morphologically highly variable *Verticillium lecanii*.

Phylogenetically based reclassification of *Paecilomyces* section *Isarioidea* – The long-used taxonomy of *Paecilomyces* by Samson (1974) divided this genus into two sections, and with all entomopathogens treated in *Paecilomyces* sect. *Isarioidea*. The type species, *P. variotii* Bainier, and all species in *Paecilomyces* sect. *Paecilomyces* are anamorphic (conidial) states of cleistothelial ascomycetes in the Eurotiomycetes. In an exact parallel with the situation for the two sections of *Verticillium*, all species in *Paec.* sect. *Isarioidea* are anamorphic states of pyrenomycte ascomycetes in the order Hypocreales, mostly in the family Clavicipitaceae although the reclassification of that family by Sung *et al.* (2007) now disperses these former *Paecilomyces* species among three families (Table 3). The taxonomic revision of *Paecilomyces* section *Prostrata* began with the lectotypification and determination of the status of *Isaria* (Hodge *et al.* 2005), a genus long ago relegated to synonymy with *Paecilomyces*, and the formal conservation of the generic name *Isaria* (Gams *et al.* 2005). The next step was a phylogenetic study that confirmed the polyphyletic nature of *Paecilomyces* in the broad sense (Luangsa-ard *et al.* 2004), followed then by a formal reclassification (with new combinations) of most species from *Paec.* sect. *Isarioidea* into *Isaria* while several other

species from this section were excluded from both *Paecilomyces* and *Isaria* and still await transfers into appropriate anamorphic genera (Table 3). Most recently, *Paec. lilacinus* was transferred to a new (as yet monotypic) genus in Ophiocordycipitaceae as *Purpureocillium lilacinum* (Luangsa-ard *et al.* 2011).

EXTREMELY IMPORTANT NEWS ABOUT CHANGES IN FUNGAL NOMENCLATURAL RULES

Dual nomenclature for anamorphic and teleomorphic generic names has been eliminated – The long-used established and accepted use of a dual nomenclatural system under the International Code of Botanical Nomenclature was replaced during the 2012 International Botanical Congress in Melbourne, Australia, and replaced with a new standard generally referred to as *One Fungus = One Name* (or by the shorter *1F=1N*) (Hawksworth 2011, Hawksworth *et al.* 2011, Norvell 2011, Taylor 2011) under which a still undefined, unstaffed system of committees of mycologists will have to consider all linked conidial (anamorphic) and sexual (teleomorphic) genera of pleiomorphic fungi and choose one generic name—generally expected to be the oldest published applicable name—will be accepted (prioritized?) while the use of all other linked generic names will be suppressed, and the species in the suppressed genera will need to be transferred to the accepted (prioritized) genus. Since no committees have yet been established nor any decisions rendered, no official information can be given here to suggestion exactly how entomopathogenic fungi (especially those in Hypocreales) will be affected, but it is that the following will represent a few of the **probable** resulting decisions for some of these fungi in the following families. The probable **ACCEPTED** generic names are given followed by the linked **genera to be suppressed and synonymized** in parentheses :

Clavicipitaceae: **METARHIZIUM** (*Metacordyceps*, *Nomuraea*, *Pochonia*, *Rotiferophthora*, etc.)

Cordycipitaceae: **CORDYCEPS** (*Beauveria*, *Isaria*, *Lecanicillium*, *Microhilum*, *Simplicillium*, etc.)

Ophiocordycipitaceae: **OPHIOCORDYCEPS** (*Hirsutella*, *Hymenostilbe*, *Paraisaria*, *Purpureocillium*, *Sorosporella*, *Syngliocladium*)

Because *Ophiocordyceps* is a much newer genus than some of its linked anamorphic (conidial) genera, it may not eventually be the case that this teleomorphic genus will be accepted as prioritized over its anamorphs; none of those anamorphic genera may be regarded as sufficiently important (except, possibly, *Hirsutella*) to be accepted in place of *Ophiocordyceps*. The problem with *Hirsutella*, however, is that this genus is very plastic and comparatively poorly understood despite its many described species, and its species are anamorphic states for fungi in all three of the families listed above.

Some of the problems of the loss of Article 59 of the ICBN (now renamed the International Code of Nomenclature for algae, fungi and plants) and of dual nomenclature are discussed by Gams *et al.* (2012). No official changes in this highly disruptive new standard for fungal nomenclature are possible until the 2017 Botanical Congress at the earliest, and it will probably be unrealistic to expect any significant change of the newly adopted rules (and even much less likely that the situation will be reversed to reflect procedures before the 2012 changes).

REFERENCES

- Gams W. 1971. *Cephalosporium-artige Schimmelpilze (Hyphomycetes)*. Gustav Fischer Verlag, Stuttgart.
- Gams W, Hodge KT, Samson RA, Korf RP, Seifert KA. 2005. (1684) Proposal to conserve the name *Isaria* (anamorphic fungi) with a conserved type. *Taxon* 52: 537. <http://dx.doi.org/10.2307/25065390>
- Gams W, Humber RA, Jaklitsch, Kirschner R, Stadler M. 2012. Minimizing the chaos following the loss of Article 59: Suggestions for a discussion. *Mycotaxon* (in press).
- Gams W, Zare R. 2001. A revision of *Verticillium* sect. *Prostrata*. III. Generic classification. *Nova Hedwigia* 72: 329-337.

- Hawksworth DL. 2011. A new dawn for the naming of fungi: Impacts of decisions made in Melbourne in July 2011 on the future of publication and regulation of fungal names. *MycoKeys* 1: 7-20. <http://dx.doi.org/10.3897/mycokeys.1.2062>
- Hawksworth DL, Crous PW, Redhead SA, Reynolds DR, Samson RA, Seifert KA, Taylor JW, Wingfield MJ, and 80 others. 2011. The Amsterdam Declaration on Fungal Nomenclature. *Mycotaxon* 116: 491–500. <http://dx.doi.org/10.5248/116.491>
- Hibbett DS, Binder M, Bischoff JF, Blackwell M, Cannon PF, Eriksson O, Huhndorf S, James T, Kirk PM, Lücking R, Lumbsch T, Lutzoni F, Matheny PB, McLaughlin DJ, Powell MJ, Redhead S, Schoch CL, Spatafora JW, Stalpers JA, Vilgalys R, Aime MC, Aptroot A, Bauer R, Begerow D, Benny GL, Castlebury LA, Crous PW, Dai Y-C, Gams W, Geiser DM, Griffith GW, Gueidan C, Hawksworth DL, Hestmark G, Hosaka K, Humber RA, Hyde K, Köljalg U, Kurtzman CP, Larsson K-H, Lichtwardt R, Longcore J, Miadlikowska J, Miller A, Moncalvo J-M, Mozley-Standridge S, Oberwinkler F, Parmasto R, Reeb V, Rogers JD, Roux C, Ryvarden L, Sampaio JP, Schuessler A, Sugiyama J, Thorn RG, Tibell L, Untereiner WA, Walker C, Wang A, Weir A, Weiss M, White M, Winka K, Yao Y-J, Zhang N. 2007. A higher-level phylogenetic classification of the Fungi. *Mycol Res* 111: 509-547. <http://dx.doi.org/10.1016/j.mycres.2007.03.004>
- Hodge KT, Gams W, Samson RA, Korf RP, Seifert KA. 2005. Lectotypification and status of *Isaria* Pers. : Fr. *Taxon* 52: 485-489. <http://dx.doi.org/10.2307/25065379>
- Humber, RA. 2012. *Entomophthoromycota*: a new phylum and reclassification for entomophthoroid fungi. *Mycotaxon* (in press).
- James, TY, Kauff F, Schoch C, Matheny PB, Hofstetter V, Cox CJ, Celio G, Geuidan C, Fraker E, Miadlikowska J, Lumbsch HT, Rauhut A, Reeb V, Arnold AE, Amtoft A, Stajich JE, Hosaka K, Sung G-H, Johnson D, O'Rourke B, Crockett M, Binder M, Curtis JM, Slot JC, Wang Z, Wilson AW, Schüßler A, Longcore JE, O'Donnell K, Mozley-Standridge S, Porter D, Letcher PM, Powell MJ, Taylor JW, White MM, Griffith GW, Davies DR, Humber RA, Morton JB, Sugiyama J, Rossman A, Rogers JD, Pfister DH, Hewitt D, Hansen K, Hambleton S, Shoemaker RA, Kohlmeyer J, Volkmann-Kohlmeyer B, Spotts RA, Serdani M, Crous PW, Hughes KW, Matsuura K, Langer E, Langer G, Untereiner WA, Lücking R, Büdel B, Geiser DM, Aptroot A, Diederich P, Schmitt I, Schultz M, Yahr R, Hibbett DS, Lutzoni F, McLaughlin DJ, Spatafora JW, Vilgalys R. 2006. Reconstructing the early evolution of Fungi using a six-gene phylogeny. *Nature (London)* 443: 818-822. <http://dx.doi.org/10.1038/nature05110>
- Luangsa-ard JJ, Houbraken J, van Doorn T, Hong S-B, Borman AM, Hywel-Jones NL, Samson RA. 2011. *Purpureocillium*, a new genus for the medically important *Paecilomyces lilacinus*. *FEMS Microbiol Lett* 321: 141-149. <http://dx.doi.org/10.1017/S0953756205002741>
- Luangsa-ard JJ, Hywel-Jones NL, Manoch L, Samson RA. 2005. On the relationships of *Paecilomyces* sect. *Isarioidea* species. *Mycol Res* 109: 581-589. <http://dx.doi.org/10.1017/S0953756205002741>
- Luangsa-ard JJ, Hywel-Jones NL, Samson RA. 2004. The polyphyletic nature of *Paecilomyces* sensu lato based on 18S generated rDNA phylogeny. *Mycologia* 96: 773-780. <http://dx.doi.org/10.2307/3762111>
- Norvell LL. 2011. Melbourne approves a new CODE. *Mycotaxon* 116: 481–490. <http://dx.doi.org/10.5248/116.481>
- Samson RA. 1974. *Paecilomyces* and some allied Hyphomycetes. *Stud Mycol* 6: 1-119.
- Sung G-H, Hywel-Jones NL, Sung J-M, Luangsa-ard JJ, Shrestha B, Spatafora JW. 2007. Phylogenetic classification of *Cordyceps* and the clavicipitaceous fungi. *Stud Mycol* 57: 5-59. <http://dx.doi.org/10.3114/sim.2007.57.01>
- Sung G-H, Spatafora JW, Zare R, Hodge KT, Gams W. 2001. A revision of *Verticillium* sect. *Prostrata*. II. Phylogenetic analyses of SSU and LSU nuclear rDNA sequences from anamorphs and teleomorphs of the Clavicipitaceae. *Nova Hedwigia* 72: 311-328.
- Taylor JW. 2011. One Fungus = One Name: DNA and fungal nomenclature twenty years after PCR. *IMA Fungus* 2: 113-120. <http://dx.doi.org/10.5598/imapfungus.2011.02.02.01>
- Zare R, Gams W. 2001. A revision of *Verticillium* section *Prostrata*. IV. The genera *Lecanicillium* and *Simplicillium*. *Nova Hedwigia* 73: 1-50.
- Zare R, Gams W. 2001. A revision of *Verticillium* section *Prostrata*. VI. The genus *Haptocillium*. *Nova Hedwigia* 73: 271-292.
- Zare R, Gams W, Culham A. 2000. A revision of *Verticillium* sect. *Prostrata* I. Phylogenetic studies using ITS sequences. *Nova Hedwigia* 71: 465-480.
- Zare R, Gams W, Evans HC. 2001. A revision of *Verticillium* section *Prostrata*. V. The genus *Pochonia*, with notes on *Rotiferophthora*. *Nova Hedwigia* 73: 51-86.

ARS COLLECTION OF ENTOMOPATHOGENIC FUNGAL CULTURES

History and Purpose of the ARSEF Collection

The goal of the ARS Collection of Entomopathogenic Fungal Cultures (ARSEF) is to provide fundamental support for basic and applied research on the fungal pathogens of invertebrates. Since its establishment in the early 1970s, this collection has served as a general research resource for the isolation, collection, preservation, and distribution of fungal strains from insects, other arthropods, and nematodes. Emphasis has always been placed on acquiring and distributing strains under active study for use as potential biological control agents. Basic research associated with the collection includes fungal systematics, fungal cytology, pathobiology, and methodology for fungal cryopreservation. The culture collection and its associated collection of microscope slides and herbarium specimens provide invaluable support for taxonomic research on and the diagnoses of fungal pathogens of invertebrates. Identification services for specimens and cultures have always been available free of charge to any laboratories requesting them.

We strive to provide users with pure and accurately identified fungal cultures., and the taxonomies applied to the fungi in this collection are continuously updated to reflect their current accepted classifications. The curator of the collection welcomes all correspondence about nomenclatural or taxonomic changes or possible misidentifications involving any ARSEF strains.

The ARSEF collection began as Richard Soper's research collection in the USDA-ARS laboratory at the University of Maine (Orono; UMO) where its cultures were at initially designated by a UMO or RS prefix before adopting ARSEF in 1985. In 1978, the ARS Insect Pathology Research Unit relocated to Ithaca, NY, to work with the Boyce Thompson Institute (BTI) on the Cornell University campus. The Insect Pathology Research Unit became the Plant Protection Research Unit (PPRU) in 1985, and was renamed in 2008 as the Biological Integrated Pest Management Research Unit (BioIPM). The ARSEF collection moved from BTI in 1990 into the US Plant, Soil & Nutrition Laboratory which was rededicated in 2008 as the Robert W. Holley Center for Agriculture & Health to commemorate Dr. Holley's work there to complete the first sequencing of any nucleic acid; he received the 1968 Nobel Prize for Medicine or Physiology for this work.

BioIPM operates the ARSEF culture collection for the USDA Agricultural Research Service; the collection is not now and has never been owned or controlled by the Boyce Thompson Institute. ARSEF is one of the largest germplasm collections in the ARS, and is widely recognized for its active support of research on fungal pathogens of invertebrates. ARSEF and its associated herbarium are registered under the ARSEF acronym since 1985 with the World Federation of Culture Collections' World Data Center on Microorganisms and the International Association of Plant Taxonomists' *Index Herbariorum*, respectively.

From 1977 through 2008, all strains in the collection were preserved by immersion in liquid nitrogen. A program to lyophilize those isolates that could tolerate such was begun in the 1990's, and has expanded in scope and pace. At the end of 2008 the vast majority of the collection was consolidated in a single large nitrogen dewar in a new facility adjacent to the current building. Requests for cultures are filled with either actively growing cultures on appropriate media or, if available, as freeze-dried units.

Identifying and Acknowledging ARSEF Strains in Publications

We request that all publications using or referring to strains obtained from ARSEF acknowledge the U.S. Department of Agriculture, ARS Plant Protection Research Unit and state the ARSEF accession numbers of these strains. We would very greatly appreciate receiving reprints of all past, current, and future publications or even periodic notification about research in progress involving the use of ARSEF strains.

Accession numbers of strains from commercial culture collections such as the American Type Culture Collection (ATCC), Centraalbureau voor Schimmelcultures (CBS), CAB International Mycological Institute (IMI), and other registered general service collections are listed in this catalog to provide complete information about specific isolates. ***Representation of cultures obtained from ARSEF as being from ATCC, CBS, IMI or UAMH or other general service culture collections violates trademark laws, and persons doing so are subject to prosecution.*** Cultures received from ARSEF should be referred to by their ARSEF numbers only even if they are co-deposited in other other culture collections.

Depositing and Exchanging Cultures

BioIPM and ARSEF encourage deposition of entomopathogenic fungal cultures in the ARSEF collection—particularly strains used in published studies—and of voucher and reference specimens to its herbarium. Depositors may reserve the right to limit redistribution of any culture deposited with ARSEF for specified times upon consultation with the curator. Depositors can receive subcultures of their own depositions at any time; these cultures do not affect any allowances of free cultures. Exchanges of cultures between ARSEF and other research or general collections of fungal cultures are encouraged and are not subject to numerical limits.

Prior to shipping cultures from countries outside the United States contact the Curator to obtain the appropriate needed importation permit from the U.S. Department of Agriculture, Animal and Plant Health Inspection Services, Plant Protection and Quarantine.

When sending cultures and/or specimens to ARSEF, it is very important to include as much of the following information as possible:

1. Scientific name (and taxonomic authority) of the fungus.
2. Common and scientific name (with taxonomic authority) of the host.
3. Order and family of the host. (***This information is especially important!***)
4. Date and site of collection.
5. Name of collector.
6. Date and name of isolator.
7. Any collection, accession, or other identifier number(s) applied by the collector or sender.
8. Medium on which a culture is sent.
9. Any special requirements or conditions for growth (such as medium, temperature, pH).

Diagnostic Services for Cultures and Specimens

Specimens and cultures of unidentified fungi from invertebrates can be submitted to ARSEF for diagnosis. This service is an important function of the ARS Collections of Entomopathogenic Fungi and is provided without charge. Identifications and information about the disposition of specimens will be mailed to the sender.

Release of ARSEF Cultures from Containment or Quarantine

Neither the curator nor any employee of ARSEF or of the Plant Protection Research Unit is entitled to authorize the release of any culture it provides from laboratory containment or quarantine in the United States or elsewhere. Recipients of ARSEF cultures are responsible for obtaining appropriate and necessary permissions from or for providing official notifications to State and Federal regulatory agencies.

ORDERING INFORMATION

Please send all requests for isolates directly to the Curator (Richard A. Humber):

ARS Collection of Entomopathogenic Fungal Cultures
Robert W. Holley Center for Agriculture & Health
Tower Rd.
Ithaca, NY 14853-2901

Telephone: [+1] 607 255-1276
OR
Fax: [+1] 607 255-1132
Email: richard.humber@ars.usda.gov

Academic, Government, and Other Nonprofit Institutions

1–12 isolates [up to 24 per calendar year]	no charge
13 or more isolates per order [25 or more per calendar year]	US\$60 per isolate

Users from nonprofit institutions can receive up to five isolates without charge in any 6 month period, and up to seven cultures in any calendar year. Requests in excess of these limits may be charged at the rate of US\$60 per additional isolate requested. Requests from commercially sponsored research programs undertaken by nonprofit institutions are charged at the commercial rate and are not subject to numerical limits. Prices are subject to change without notice.

Commercial and Industrial Institutions

US\$85 per isolate

Nonprofit institutions working on commercially sponsored contractual projects (such as screening programs) are charged at the rate of US\$85 per strain requested. There are no limits on the numbers of cultures that can be requested or shipped. Prices are subject to change without notice.

Commercial or industrial firms supporting research at the ARS Plant Protection Research Unit are entitled to free access to cultures pertinent to contracted projects; all other requests are charged at the current rate.

TERMS OF SHIPMENT

If necessary, billings for isolates are issued through the Boyce Thompson Institute (BTI). *Checks or money orders for strains must be payable to the Boyce Thompson Institute* and sent directly to the curator of the ARS Collections of Entomopathogenic Fungi, to BTI or deposited by direct electronic funds transfer according to information provided by BTI. Consult the curator of the collections with questions about fees due for any particular shipment.

All recipients of cultures are strongly encouraged to provide express shipper account numbers to allow shipping costs to be billed directly to recipients, thus assuring significant cost-savings to the ARSEF collection.

We request confirmation of receipt and viability of cultures shipped. Inviable strains will be replaced.

ARSEF reserves the right to refuse to ship isolates

- to recipients who cannot handle them using standard microbiological practices,
- to laboratories that cannot assure laboratory containment of isolates except after obtaining permissions from applicable State and Federal regulatory agencies, or
- if use of routine mailing or shipping procedures cannot assure the receipt of viable cultures.

Neither ARSEF, BiolPM, nor the Boyce Thompson Institute is liable for damages arising from the misidentification of strains.

INTERPRETATION OF STRAIN ACCESSION DATA

The following examples provide a guide to the arrangement and interpretation of collection data included in this catalog.

***Beauveria bassiana* (Balsamo) Vuillemin**

1564 [CBS 111238]. KV Deséo (103) Cortellini. Pupa, *Hyphantria cunea* [Lepidoptera: Arctiidae]. Mar 1984. Italy: Villa Cadé (Reggio Emilia), Emilia-Romagna. Identification verified genomically. Ex-type isolate.

1564	ARSEF accession number.
[CBS 111238]	Alternative deposition in another culture collection.
KV Deséo (03)	Depositor and depositor's reference or accession number.
Cortellini	Collector of this isolate.
<i>Hyphantria cunea</i> [Lepidoptera: Arctiidae]	Original host [host's order and family]
Mar 1984	Date of accession or receipt by ARSEF.
Italy: Villa Cadé (Reggio Emilia), Emilia-Romagna	Country of origin followed by the locality and state.
Identification verified genomically. Ex-type isolate	Additional essential information about this isolate.

***Conidiobolus thrombooides* Drechsler**

73 [CSIRO EM534; FPMI 28] RG Kenneth (3040) ← ATCC (24419) ← DM MacLeod ← G Thoizon. *Rhopalosiphum insertum* [Homoptera: Aphididae]. Rec'd 18 Jan 1976. France: Val-de-Marne, La Varenne.

73	ARSEF accession number.
[CSIRO EM534; FPMI 28]	Alternative depositions of this strain in other culture collections.
RG Kenneth (3040)	Depositor and depositor's reference or accession number.
← ATCC (24419 ← DM MacLeod ← G Thoizon	Culture provenance: RG Kenneth obtained the culture from ATCC, which received it from DM MacLeod, who received it from G Thoizon.
<i>Rhopalosiphum insertum</i> [Acari: Eriophyidae]	Original host [host's order and family]
Rec'd Jan 18 1976	Date of receipt by ARSEF.
France: Val-de-Marne, La Varenne	Country of origin followed by the locality and region.

***Hirsutella thompsonii* Fisher**

137 [ATCC 24874; CBS 952.73] CW McCoy (Fla. 68). *Phyllocoptrus oleivora* [Acar: Eriophyidae]. 1 Jan 1970. USA: Orlando, Florida.

137	ARSEF accession number.
[ATCC 24874; CBS 952.73]	Alternative depositions of this strain in other culture collections.
CW McCoy (Fla. 68)	Depositor and depositor's reference or accession number.
<i>Phyllocoptrus oleivora</i> [Homoptera: Aphididae]	Original host together with the host's order and family.
Jan 1 1970	Date of accession or receipt by ARSEF. Note: January 1 is a default date if an exact date in a year is unknown; the first day of the month is the default if no specific day in a month is known.
USA: Orlando, Florida	Country of origin followed by the locality and state.

ABBREVIATIONS

Information about the world's officially registered culture collections, their registered acronyms (e.g., ARSEF), and more is available from the CCINFO database and from other resources available at the website of the World Data Center for Microbiology <http://wdcm.nig.ac.jp/WDCHomePage_text.html>

ARSEF	ARS Collection of Entomopathogenic Fungi, USDA-ARS BioIPM Research Unit, Robert W. Holley Center for Agriculture & Health, 538 Tower Rd., Ithaca, New York, 14853-2901, USA
ATCC	American Type Culture Collection, PO Box 1549, Manassas, Virginia 20108, USA
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza, Proyecto UIP, Apdo. Postal 7170, Turrialba, Costa Rica.
CBS	Centraalbureau voor Schimmelcultures, Uppsalaalaan 8, 3584 CT Utrecht, The Netherlands
CCF	Culture Collection of Fungi, Department of Botany, Charles University, Prague, Czech Republic
CCFC	Canadian Collection of Fungus Cultures, Centre for Land and Biological Resources Research, Room 1015, K.W. Neatby Bldg., Ottawa, Ontario K1A 0C6, Canada
CDC	Centers for Disease Control and Prevention, Atlanta, Georgia 30333, USA
CENARGEN	Centro Nacional de Pesquisa de Recursos Geéticos e Biotecnologia, S.A.I.N. Parque Rural, C.P. 102372, 70770 Brasília, D.F., Brazil
CIRI	Corn Insects Research Unit, USDA-ARS, R.R. Box 45B, Ankeny, Iowa 50021, USA
CNPAF	National Center for Agricultural Research on Rice and Beans, EMBRAPA, Goiânia, Goiás, Brazil
CNPS	National Center for Agricultural Research on Soybeans, EMBRAPA, Londrina, Paraná, Brazil
CP	Strains isolated during joint US-Brazil program funded by US-AID to study fungal biocontrol of the insect pests of cowpeas
DAOM	National Mycological Herbarium, Centre for Land and Biological Resources Research, Agriculture Canada, Central Experimental Farm, Ottawa, Ontario, K1A 0C6, Canada
DAR	New South Wales Department of Agriculture, Rydalmere, NSW, Australia
EFCC	Korean Entomopathogenic Fungal Collection (JM Sung, Curator), Dept. of Agricultural Biology, Kangwon National University, Chuncheon, Rep. of Korea
FI	CSIRO Entomology Division, Collection of Entomopathogenic Fungi, Black Mountain Laboratories, Canberra, ACT, Australia. This collection, formerly curated by R. Milner, is now orphaned and is being transferred to ARSEF.
FPMI	Great Lakes Forestry Center (formerly Forest Pest Management Institute), 1219 Queen Street East, Sault Ste. Marie, Ontario P6A 5M7, Canada. This collection, formerly led by D MacLeod and D Tyrrell is orphaned and endangered. Its surviving isolates <i>may</i> be

transferred to DAOM.

GCRI	Horticulture Research International (formerly, Glasshouse Crops Research Institute), Worthing Road, Littlehampton, W. Sussex BN17 6LP, England, UK
HACC	Hindustan Antibiotics Ltd., Pimpri, Poona, India
IMI	(Now incorporated in United Kingdom National Culture Collection [UKNCC]) CABI Bioscience, Bakeham Lane, Egham, Surrey TW20 9TY, UK
INRA	Station de Recherches de lutte Biologique et Biocoenotique, INRA (Institut National de la Recherche Agronomique), La Minière – 78280 Guyancourt, France
IPLB	Unité de Lutte Biologique, Institut Pasteur, 28 Rue de Dr. Roux, 75724 Paris, France
IRRI	International Rice Research Institute, P.O. Box 933, Manila, Philippines
KEFC	(see EFCC)
KSU	Kansas State University, Department of Entomology, Manhattan, Kansas 66506, USA
MAF	Ministry of Agriculture and Fisheries, Canterbury Agriculture and Science Centre, Ellesmere Junction Road, P.O. Box 24, Lincoln, New Zealand
MU	Miami University, Willard Sherman Turrell Herbarium, Department of Botany, 79 Upham Hall, Oxford, Ohio 45056, USA
NCTC	National Collection of Type Cultures, Public Health Laboratory Service, 61 Colindale Ave., London NW9 5HT, England, UK
NRRL	ARS Culture Collection, USDA-ARS National Center for Agricultural Utilization Research, 1815 N. University, Peoria, Illinois 61604, USA
PSU	<i>Fusarium</i> Research Center, The Pennsylvania State University, 216 Buckhout Laboratory, University Park, Pennsylvania 16802, USA
QEC	Queen Elizabeth College, University of London, Department of Biology, Campden Hill Road, London W8 7AH, England, UK
QM	U.S. Army Natick Laboratories (formerly, Quartermaster Research and Development Center), Natick Massachusetts. Note: This collection has been transferred to NRRL.
RSA	Rancho Santa Ana Botanic Garden, 1500 North College Ave., Claremont, California 91711, USA
SBI	Sugarcane Breeding Institute, Indian Council of Agricultural Research, Coimbatore – 641 007, Tamil Nadu, India
UAF	University of Arkansas, Department of Entomology, 321 Agriculture Building, Fayetteville, Arkansas 72701, USA
UAMH	University of Alberta Microfungus Collection, Devonian Botanic Garden, University of Alberta, Alberta T6G 2H7, Canada

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Fungal Cultures

Unidentified / Hyphomycetes *Aphanocladium album*

Unidentified / Hyphomycetes

- 2225 [ARSEF 2210] MC Rombach (140486-1) ← H Beddu Rewa. [Coleoptera: Curculionidae] on palm tree. 22 Mar 1986. Indonesia: Baritiwurung (Butterfly Valley), nr. Ujungpandang, Sulawesi Selatan, Celebes.
- 2999 SV Krueger (MF-Ec). *Rhizotrogus majalis* [Coleoptera: Scarabaeidae]. Feb 1990. USA: Geneva, New York. [Hemiascomyete].
- 5223 LA Lacey (96001). *Popillia japonica* [Coleoptera: Scarabaeidae]. 13 May 1996. Japan: Golf course, Sapporo, Hokkaido.
- 5224 LA Lacey (96002). *Popillia japonica* [Coleoptera: Scarabaeidae]. 10 May 1996. Japan: Golf course, Sapporo, Hokkaido.
- 5225 LA Lacey (96003). *Popillia japonica* [Coleoptera: Scarabaeidae]. 10 May 1996. Japan: Golf course, Sapporo, Hokkaido.
- 5226 LA Lacey (96004). *Popillia japonica* [Coleoptera: Scarabaeidae]. 16 May 1996. Japan: Golf course, Sapporo, Hokkaido.
- 5227 LA Lacey (96005). *Popillia japonica* [Coleoptera: Scarabaeidae]. 16 May 1996. Japan: Golf course, Sapporo, Hokkaido.
- 5677 BL Parker (SPT-014). [Coleoptera: Coccinellidae]. 18 Jan 1998. Turkey: Hurbit Mountain, Hatay.
- 5695 JM Sung (KEFC-1087). [Coleoptera: Curculionidae]. 9 Jul 1997. Republic of Korea: Yongmoon Mt., Gyeonggi Province.
- 8155 LS Bauer and H Liu (MF-246). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 28 Jul 2006. USA: Brighton, Michigan.
- 8179 LS Bauer and H Liu (MF-273). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8183 LS Bauer and H Liu (MF-281). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8184 LS Bauer and H Liu (MF-282). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 10 Aug 2006. USA: Lansing, Michigan.
- 8641 [CENARGEN CG 639] [Coleoptera]. Rec'd 18 Sep 2007. Ghana. **RESTRICTED ACCESS: consult Curator.**
- 1634 [ARSEF 1667 (deaccessioned)] TJ Poprawski (0120). Nymph, [Coleoptera]. 27 Jun 1984. France: Saint-Étienne du Bois, Loire.

Unidentified sp.

These fungi were accessioned without verified identifications. Many strains listed here will be reassigned to known taxa as quickly as the opportunity allows. Some strains are undescribed new species; some are sterile and may not be identifiable to a level lower than the class.

- 3471 CENARGEN (CG 304). *Sternechus subsignatus* [Coleoptera: Curculionidae]. 1990. Brazil: Passo Fundo, Rio Grande do Sul.
- 3478 CENARGEN (CG 311). *Aracanthus* sp. [Coleoptera: Curculionidae]. 1990. Brazil: Santa Maria, Rio Grande do Sul.
- 3714 RA LeBrun ← J Hanula (C-5). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 1 Jul 1991. Location not specified.
- 3719 RA LeBrun ← J Hanula (W-2). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. Summer 1991. Location not specified.
- 3722 Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 21 Jun 1991. USA: Groton, Connecticut.
- 3724 S DeFazio. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 18 May 1992. Location not specified.
- 3821 ERD Reyes (BbCO2) or (BbH). Adult, *Hippodamia convergens* [Coleoptera: Coccinellidae] OVERWIN-TERING SITE. 9 Oct 1992. Mexico: Guanajuato State.
- 3841 LA Lacey (92140). *Popillia japonica* [Coleoptera: Scarabaeidae]. Rec'd 24 Nov 1992. Portugal: Terceira Island, Azores.
- 3980 LA Lacey (93017) ← S Reichert. Adult, *Oulema melanopus* [Coleoptera: Chrysomelidae]. 19 Apr 1993. France: La Valette.
- 4037 T Steenberg (251). *Phyllotreta nigripes* [Coleoptera: Chrysomelidae]. Oct 1991. Denmark: Copenhagen, Tåstrup, Zealand.
- 4140 [DAT 25] AC Rath (F025). *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 1986. Australia: Hamilton, Tasmania.

Acremonium alternatum Link : Fries [Sordariomycetes: Hypocreales]

- 7282 FE Vega (CBB9-2). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jan 2004. Colombia: Chinchiná, Caldas.

Acremonium furcatum F&R Moreau ex Gams [Sordariomycetes: Microascales] Microascaceae

- 1372 TJ Poprawski (083). Egg, *Hypera postica* [Coleoptera: Curculionidae]. 21 Jun 1983. France: Choisy-en-Brie, Haute-Savoie.

Aphanocladium album (Preuss) Gams [Sordariomycetes: Hypocreales] Nectriaceae

- 1329 TJ Poprawski (085). Egg, *Hypera postica* [Coleoptera: Curculionidae]. 5 Jun 1983. France: Chichery.

Aspergillus sp.

[Eurotiomycetes: Eurotiales]
Trichocomaceae

- 6571 LS Bauer. Egg mass, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 23 May 2000. USA: from laboratory colony, USDA Forest Service, NCFS, East Lansing, Michigan.
- 7048 TM O'Neil and DW Spurgeon. *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd 12 Aug 2002. USA: Southern Plains Agricultural Research Center, College Station, Texas.

Aspergillus flavus Link:Fries

[Eurotiomycetes: Eurotiales]
Trichocomaceae

- 6454 Z G/Tsadik (5/03-BB). *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. 3 Oct 1999. Ethiopia: Northern Shoa.
- 6469 LS Bauer (2UIC1817). Larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] from laboratory colony, USDA Forest Service, NCFS. Rec'd 19 Feb 2000. USA: East Lansing, Michigan.
- 9381 DI Shapiro Ilan. *Tenebrio molitor* [Coleoptera: Tenebrionidae] for rearing of entomopathogenic nematodes. Rec'd 6 Jan 2010.

Aspergillus nidulans(?) (Eidam) Winter

[Eurotiomycetes: Eurotiales]
Trichocomaceae

- 6515 RT Mayer. Larva, *Diaprepes abbreviata* [Coleoptera: Curculionidae]. Rec'd 10 May 2000. USA: Florida.

Aspergillus parasiticus Speare

[Eurotiomycetes: Eurotiales]
Trichocomaceae

- 2173 MC Rombach (140486-1) ← H Beddu Rewa. [Coleoptera: Curculionidae] on palm tree. 22 Mar 1986. Indonesia: Baritiwurung (Butterfly Valley), nr. Ujungpandang, Sulawesi Selatan, Celebes.

Batkoia sp.

[Entomophthoromycotina: Entomophthorales]
Entomophthoraceae

- 5810 RA Humber. [Coleoptera: Cantharidae]. 9 Aug 1998. Denmark.

Beauveria sp.

[Sordariomycetes: Hypocreales]

Cordycipitaceae. Almost all strains listed here closely resemble *B. bassiana* (or *B. brongniartii*) but were not so identified because of small (and possibly insignificant) differences in conidia size and/or shape.

- 547 VA Dyck. *Pachybrachis pallicornis* [Coleoptera: Chrysomelidae]. Acc'd 17 Sep 1986. Malaysia.

- 1327 TJ Poprawski (082). Egg, *Hypera postica* [Coleoptera: Curculionidae]. 16 May 1983. France: Saint-Laurent, Vosges.
- 1681 M Shimazu (F-333). *Shirahoshizo insidiosus* [Coleoptera: Curculionidae]. 27 Jan 1982. Japan: Takao, Tokyo Prefecture.
- 1682 M Shimazu (F-357(11)). *Anomala cuprea* [Coleoptera: Scarabaeidae]. 20 Nov 1980. Japan: Nagano Prefecture.
- 1835 SB Alves (295). *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd 21 Jan 1985. Brazil.
- 2412 K Narayanan (9). *Xyloryctes jamaicensis* [Coleoptera: Scarabaeidae]. Acc'd 6 May 1987. India.
- 4027 T Steenberg (231) ← CW Riedel. *Coccinella septempunctata* [Coleoptera: Coccinellidae]. Nov 1990. Denmark: Slangerup, Zealand.
- 4390 LA Lacey (94132). *Popillia japonica* [Coleoptera: Scarabaeidae]. 27 Apr 1994. Japan: Sapporo, Hokkaido.
- 4391 LA Lacey (94133). *Popillia japonica* [Coleoptera: Scarabaeidae]. 27 Apr 1994. Japan: Sapporo, Hokkaido.
- 4392 LA Lacey (94134). *Popillia japonica* [Coleoptera: Scarabaeidae]. 27 Apr 1994. Japan: Sapporo, Hokkaido.
- 4853 JM Sung (C-332). Adult, [Coleoptera: Coccinellidae]. Jul 1994. Republic of Korea: KNU experiment Forest, Kangwon National University.
- 4909 LA Lacey (95011). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4910 LA Lacey (95012). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4911 LA Lacey (95013). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4912 LA Lacey (95014). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4913 LA Lacey (95015). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4914 LA Lacey (95016). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4915 LA Lacey (95017). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4916 LA Lacey (95018). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 4917 LA Lacey (95019). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.

- 4918 LA Lacey (95020). Adult, *Tomicus pimperda* [Coleoptera: Scolytidae]. 8 Mar 1995. France: Auzon (River), Vaucluse.
- 5186 S Gouli (GA-96). [Coleoptera: Lampyridae]. 2 Jun 1995. USA: Motyka's sugar maple stand, Williamstown, Vermont.
- 5622 I Vänninen (SF85-2). Larva, *Tribolium castaneum* [Coleoptera: Tenebrionidae] as bait from soil. 18 Jul 1985. Finland: Pernaja.
- 5678 BL Parker (SPT-020). [Coleoptera: Coccinellidae]. 19 Jan 1998. Turkey: Karadao Mountain, Yavuzeli, Gaziantep.
- 5697 JM Sung (KEFC-1105). [Coleoptera]. 28 Jun 1997. Republic of Korea: Mt. Gyaeryong, Chungnam Province.
- 5831 BL Parker (SPT 003). [Coleoptera]. 17 Jan 1998. Turkey: Karabiyikli, Narli, Kahraman Maras.
- 5833 BL Parker (SPT 013/1). [Coleoptera: Coccinellidae]. 18 Jan 1998. Turkey: Hursit Mt., Gaziantep, Gaziantep.
- 7463 [CEP 061] C López Lastra. [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 13 Jul 2004. Argentina: San Vicente, Buenos Aires.
- 7580 [SRCAMB B-22] V Likhovidov ← BA Borisov. Larva, [Coleoptera: Elateridae] Isolated from stroma of *Cordyceps* sp. 28 Jul 2001. Russian Federation: Kedrovaya Pad Nature Reserve, Primorsky Krai. Field Collection Number F-172.
- 7591 [SRCAMB B-182] V Likhovidov ← BA Borisov. [Coleoptera: Coccinellidae]. Aug 2002. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-173.
- 7595 [SRCAMB B-405] V Likhovidov ← BA Borisov. [Coleoptera]. Oct 1990. Ukraine: Kherson Oblast. Field Collection Number F-207.
- 8110 LS Bauer and H Liu (MF-101). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 3 Mar 2003. USA: Northville, Michigan.
- 8111 LS Bauer and H Liu (MF-102). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 3 Mar 2003. USA: Northville, Michigan.
- 8112 LS Bauer and H Liu (MF-201). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 4 Dec 2005. USA: Brighton, Michigan.
- 8113 LS Bauer and H Liu (MF-202). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.
- 8116 LS Bauer and H Liu (MF-205). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.
- 8117 LS Bauer and H Liu (MF-206). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.
- 8119 LS Bauer and H Liu (MF-209). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 23 Jan 2006. USA: Brighton, Michigan.
- 8120 LS Bauer and H Liu (MF-210). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 23 Jan 2006. USA: Brighton, Michigan.
- 8121 LS Bauer and H Liu (MF-211). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 23 Jan 2006. USA: Brighton, Michigan.
- 8122 LS Bauer and H Liu (MF-212). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 23 Jan 2006. USA: Brighton, Michigan.
- 8123 LS Bauer and H Liu (MF-213). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 16 Dec 2005. USA: Brighton, Michigan.
- 8124 LS Bauer and H Liu (MF-214). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 2 Feb 2006. USA: Brighton, Michigan.
- 8125 LS Bauer and H Liu (MF-215). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 5 Mar 2006. USA: Brighton, Michigan.
- 8126 LS Bauer and H Liu (MF-216). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 5 Mar 2006. USA: Brighton, Michigan.
- 8127 LS Bauer and H Liu (MF-217). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 5 Mar 2006. USA: Brighton, Michigan.
- 8128 LS Bauer and H Liu (MF-218). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 5 Mar 2006. USA: Brighton, Michigan.
- 8129 LS Bauer and H Liu (MF-219). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 5 Mar 2006. USA: Brighton, Michigan.
- 8130 LS Bauer and H Liu (MF-220). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8132 LS Bauer and H Liu (MF-222). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8133 LS Bauer and H Liu (MF-223). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8134 LS Bauer and H Liu (MF-224). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8135 LS Bauer and H Liu (MF-225). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8136 LS Bauer and H Liu (MF-226). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8137 LS Bauer and H Liu (MF-227). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.
- 8138 LS Bauer and H Liu (MF-228). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 9 Jan 2006. USA: Ann Arbor, Michigan.

- 8182 LS Bauer and H Liu (MF-279). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8185 LS Bauer and H Liu (MF-283). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8186 LS Bauer and H Liu (MF-284). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8187 LS Bauer and H Liu (MF-285). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8188 LS Bauer and H Liu (MF-286). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Summer 2006. USA: Lansing, Michigan.
- 8250 P Narayanasamy. Adult, *Basilepta fulvicornis* [Coleoptera: Chrysomelidae] on *Elettaria cardamomum* (L.) Maton, cardamom crop. 30 Aug 2006. India: Tamil Nadu.
- 9272 Z Demirbag and E Tanyeli (Dm-6). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.

Beauveria amorpha (von Hoehnel) Minnick, SA Rehner & Humber
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Replaces *B. amorpha* (von Hoehnel) Samson & Evans.

- 1676 M Shimazu (F-77). *Anomala costata* [Coleoptera: Scarabaeidae]. 11 Oct 1971. Japan: Daimon, Nagano Prefecture.
- 1680 M Shimazu (F-313). *Psacothea hilaris* [Coleoptera: Cerambycidae]. Oct 1981. Japan: Takao, Tokyo Prefecture.
- 1969 KV Raman. *Premnotrypes suturicallus* [Coleoptera: Curculionidae]. 1985. Peru: Andes Mountains. Identification verified genomically.
- 4149 [DAT 142] AC Rath (F142). Pre-pupa, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 23 Jun 1989. Australia: Glen Morey, Woodbury, Tasmania. Identification verified genomically.
- 4990 LA Lacey (95048). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. 7 Sep 1995. Azores: Teceira.

Beauveria amorpha(?) (van Hoehnel) Samson & HC Evans
[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 6827 TL Dubois (WU 20 (2)). *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 25 Jul 2000. PR China: Wuhe, Anhui.

Beauveria asiatica SA Rehner & Humber

[Sordariomycetes: Hypocreales]

Cordycipitaceae. Defined primarily by genotypic characters

- 4384 LA Lacey (94135). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 5 May 1994. China: Cangzhou. Identification verified genomically.
- 4474 LA Lacey (94152). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou. Identification verified genomically.

Beauveria bassiana (Balsamo-Crivelli) Vuillemin
[Sordariomycetes: Hypocreales]

Cordycipitaceae. Major synonym: *Beauveria densa* (Link:Fries) Picard

- 149 M Wojciechowska (28). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 18 Jul 1977. France.
- 150 M Wojciechowska (24). [Coleoptera: Elateridae]. Rec'd 18 Jul 1977. France.
- 157 M Wojciechowska (1110). *Anthicus floralis* [Coleoptera: Anthicidae]. Rec'd 18 Jul 1977. Poland.
- 201 JD Vandenberg. *Diabrotica undecimpunctata* [Coleoptera: Chrysomelidae] on greenbeans. 22 Oct 1977. USA: greenhouse, Corvallis, Oregon. Mycotech's GHA (US Patent 5,939,065; 17 Aug 1999), the active ingredient in Mycotrol products, is a reisolate of this strain.
- 252 C Madore. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 14 Sep 1978. USA: greenhouse, Orono, Maine.
- 293 DW Roberts ← CW McCoy. [Coleoptera]. Acc'd 4 Jan 1979. Location not specified.
- 301 DW Roberts ← B Schaefferberg. [Coleoptera]. Acc'd 23 Mar 1979. Poland.
- 317 RA LeBrun. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 27 Feb 1979. USA: Rhode Island.
- 318 RA LeBrun. [Coleoptera: Cerambycidae]. Rec'd 27 Feb 1979. USA: Rhode Island.
- 319 RA LeBrun. [Coleoptera: Cerambycidae]. Rec'd 27 Feb 1979. Mexico.
- 325 [CSIRO FI49] RS Soper. [Coleoptera: Nitidulidae] on maize. 14 Feb 1979. Australia: Atherton, Queensland.
- 336 C Russel. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 25 Aug 1978. USA: Georgia.
- 337 C Russel. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 25 Aug 1978. USA: Georgia.
- 340 DW Roberts ← G Zimmermann. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 1965. Germany: Darmstadt, Hesse.
- 344 J Lindegren. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Feb 1979. USA: Yakima, Washington.

- 350 IM Abalis. [Coleoptera]. Acc'd 8 Jun 1979. USA: Ithaca, New York.
- 353 C Gordon. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. May 1978. USA: laboratory colony, Orono, Maine.
- 384 INRA. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd Sep 1979. France.
- 412 CW McCoy. *Diaprepes abbreviata* [Coleoptera: Curculionidae]. 27 Jul 1979. USA: Apopka, Florida.
- 413 CW McCoy. *Araecerus fasciculatus* [Coleoptera: Anthribidae]. 8 May 1979. USA: Fruitland Park, Florida.
- 416 CW McCoy. *Diaprepes abbreviata* [Coleoptera: Curculionidae]. 20 Jul 1979. USA: Apopka, Florida.
- 433 *Diaprepes abbreviata* [Coleoptera: Curculionidae]. 14 Jan 1980. Location not specified.
- 504 RS Soper. [Coleoptera: Chrysomelidae]. 12 Aug 1980. Yugoslavia: orchard behind bus station, Zabari, Serbia.
- 505 RA Humber. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 14 Aug 1980. Yugoslavia: potato field at road marker 119 on M22, nr. Srbobran.
- 506 RA Humber and RS Soper. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] on potato. 14 Aug 1980. Yugoslavia: road marker 82 on M22, nr. Srbobran, Freketic.
- 507 C Sidor and RS Soper. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] on potato. 16 Aug 1980. Yugoslavia: between Putnici and Indjija.
- 509 C Sidor. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] on potato. 18 Aug 1980. Yugoslavia: nr. Varazdin by transformer in field, Nedeljanec, Croatia.
- 510 RA Humber and RS Soper. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] on potato. 26 Aug 1980. Yugoslavia: Forestry Inst. Nursery, E of Pec, nr. Crno Brdo.
- 534 MG Ward. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd Oct 1980. USA: established laboratory colony, Boyce Thompson Institute, Ithaca, New York.
- 535 MG Ward. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd Oct 1980. USA: newly established laboratory colony, Boyce Thompson Institute, Ithaca, New York.
- 721 TB Clark. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Feb 1982. Colombia: ?CIAT, Cali, Valle del Cauca.
- 731 [CNPAF 81-11-25-05; CP 5] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 25 Nov 1981. Brazil: Costa do Surubin, Cristo Rei, Amazonas.
- 732 [CNPAF 81-11-25-07; CP 6] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 25 Nov 1981. Brazil: Costa do Surubin, Cristo Rei, Amazonas.
- 733 [CNPAF 82-1-6-01; CP 7] RA Daoust. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 6 Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 734 [CNPAF 82-1-6-03; CP 9] RA Daoust ← G Pereira Rios. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 6 Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 735 [CNPAF 82-1-15-02; CP 14] RA Daoust. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 736 [CNPAF 82-1-6-04; CP 10] RA Daoust ← G Pereira Rios. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 6 Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 738 [CNPAF 82-2-9-01; CP 23] RA Daoust. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 9 Feb 1982. Brazil: CNPAF, Goiânia, Goiás.
- 739 [CNPAF 82-2-3-01; CP 27] RA Daoust. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. 3 Feb 1982. Brazil: CNPAF, Goiânia, Goiás.
- 751 P Jolivet. [Coleoptera: Chrysomelidae]. Apr 1982. Vietnam: Cuc Phuong Forest. Identification verified genomically.
- 752 [CNPAF 82-2-15-01; CP 34] RA Daoust. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. Feb 1982. Brazil: CNPAF, Goiânia, Goiás.
- 753 [CNPAF 82-3-24-01; CP 36] RS Soper. *Aracanthus* sp. [Coleoptera: Curculionidae]. 24 Mar 1982. Brazil: Brejo Santo, Ceará.
- 754 [CNPAF 82-4-4-01; CP 38] RA Daoust. [Coleoptera]. 4 Apr 1982. Brazil: CNPAF, Goiânia, Goiás.
- 756 [CNPAF 81-11-25-04; CP 4] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 25 Nov 1981. Brazil: Costa do Surubin, Cristo Rei, Amazonas.
- 757 [CNPAF 82-3-23-01; CP 35] RA Daoust. [Coleoptera: Tenebrionidae]. 23 Mar 1982. Brazil: Missão Velha, Ceará.
- 758 [CNPAF 82-3-1-03; CP 29] RA Daoust. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. 1 Mar 1982. Brazil: CNPAF, Goiânia, Goiás.
- 783 [CNPAF 82-5-6-02; CP 59] RA Daoust ← JPP de Araújo. Adult, [Coleoptera: Tenebrionidae]. 6 May 1982. Brazil: Barbalha, Ceará.
- 784 [CNPAF 82-4-30-01C; CP 47] RA Daoust and JPP de Araújo. Adult, [Coleoptera: Elateridae]. 30 Apr 1982. Brazil: Novo Oriente, Ceará.
- 785 [CNPAF 82-4-29-01; CP 46] RA Daoust. Adult, [Coleoptera: Cerambycidae]. 29 Apr 1982. Brazil: Caucaia, Ceará.
- 786 [CNPAF 82-5-3-03B; CP 51] RA Daoust and FE de Araújo. *Crimissa* sp. [Coleoptera: Chrysomelidae]. 3 May 1982. Brazil: 20 km N of Pacajus, Ceará.
- 787 [CNPAF 82-5-6-01; CP 58] RA Daoust ← JPP de Araújo. Adult, [Coleoptera: Tenebrionidae]. 6 May 1982. Brazil: Barbalha, Ceará.
- 788 [CNPAF 82-5-3-03A; CP 50] RA Daoust and FE de Araújo. *Crimissa* sp. [Coleoptera: Chrysomelidae]. 3 May 1982. Brazil: 20 km N of Pacajus, Ceará.

- 804 [CNPAF 82-4-30-01D; CP 48] RA Daoust and JPP de Araújo. Adult, [Coleoptera: Elateridae]. 30 Apr 1982. Brazil: Novo Oriente, Ceará.
- 805 [CNPAF 82-5-3-01; CP 49] RA Daoust ← LS Teixeira. *Crimissa* sp. [Coleoptera: Chrysomelidae]. 3 May 1982. Brazil: Pacajus, Ceará.
- 809 [CNPAF 82-6-28-01; CP 61] RA Daoust ← SM dos Santos. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. 28 Jun 1982. Brazil: CNPAF, Goiânia, Goiás.
- 813 GG Soares (6). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 5 Mar 1982. France: Plougastel-Daoulas, Finistere.
- 814 GG Soares (10). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 5 Mar 1982. France: Plougastel-Daoulas, Finistere.
- 815 GG Soares (12). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 5 Mar 1982. France: Plougastel-Daoulas, Finistere.
- 816 GG Soares (20) ← JP Aeschlimann. 5th instar larva, *Sitona discoideus* [Coleoptera: Curculionidae]. 29 Mar 1982. France: Montpellier, Hérault.
- 842 *Metamasius* sp. [Coleoptera: Curculionidae]. Acc'd 6 Jun 1983. Colombia.
- 928 [CNPAF 82-07-27-01; CP 63] RA Daoust ← SM dos Santos. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 27 Jul 1982. Brazil: CNPAF, Goiânia, Goiás.
- 930 [CNPAF 82-12-15-02; CP 68] RA Daoust ← SM dos Santos. [Coleoptera: Curculionidae]. Dec 1982. Brazil: CNPAF, Goiânia, Goiás.
- 931 [CNPAF 82-12-20-01; CP 69] RA Daoust ← H da Silva Coelho. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 20 Dec 1982. Brazil: CNPAF, Goiânia, Goiás.
- 934 [CNPAF 83-1-25-01; CP 72] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 25 Jan 1983. Brazil: CNPAF, Goiânia, Goiás.
- 937 [CNPAF 83-3-3-01; CP 76] RA Daoust ← E Ferreira. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. 3 Mar 1983. Brazil: F. Itamaraty, Ponta Porã, Mato Grosso.
- 938 [CNPAF 83-3-3-02; CP 77] RA Daoust ← E Ferreira. *Diabrotica paranaensis* [Coleoptera: Chrysomelidae]. 3 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 941 [CNPAF 83-03-16C; CP 82] RA Daoust and BP Magalhães. *Chalcodermus* sp. [Coleoptera: Curculionidae]. 16 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 942 [CNPAF 83-03-16D; CP 83] RA Daoust and BP Magalhães. *Chalcodermus* sp. [Coleoptera: Curculionidae]. 16 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 943 [CNPAF 83-03-16E; CP 84] RA Daoust and BP Magalhães. *Chalcodermus* sp. [Coleoptera: Curculionidae]. 16 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 946 [CNPAF 83-03-15E; CP 87] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 947 [CNPAF 83-03-15-M; CP 88] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 948 [CNPAF 83-03-15-O; CP 89] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 949 [CNPAF 83-03-15-P; CP 90] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 950 [CNPAF 83-03-15-Q; CP 91] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 951 [CNPAF 83-03-15B; CP 92] RA Daoust and BP Magalhães. *Cerotoma* sp. [Coleoptera: Chrysomelidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 952 [CNPAF 83-03-15H; CP 93] RA Daoust and BP Magalhães. Adult, [Coleoptera: Carabidae]. Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 953 [CNPAF 83-03-16K; CP 98] RA Daoust and BP Magalhães. *Chalcodermus* sp. [Coleoptera: Curculionidae]. 16 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 956 [CNPAF 83-5-27; CP 101] RA Daoust ← SM dos Santos. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 27 May 1983. Brazil: CNPAF, Goiânia, Goiás.
- 958 [CNPAF 83-01-06A (CB 97); CP 104] RA Daoust ← SM de Carvalho. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 6 Jan 1983. Brazil: Londrina, Paraná.
- 982 [CNPAF 83-03-17B; CP 95] RA Daoust and BP Magalhães. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 17 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 1016 ME McGiffen. *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Nov 1983. Location not specified.
- 1039 L Allee. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1983. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1041 J Aoki (Isa. 1) ← S Miyajima. *Psacothea hilaris* [Coleoptera: Cerambycidae]. Oct 1981. Japan: Nagakute, Aichi Prefecture.
- 1060 [CNPS 31] F Moscardi. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 1983. Brazil: Londrina, Paraná.
- 1061 [CNPS 32] F Moscardi ← Francisco. [Coleoptera: Curculionidae]. 1983. Brazil: Londrina, Paraná.
- 1073 TJ Poprawski (83-48). Adult, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Jul 1983. France: tree nursery containers, Les Thilliers-en-Vexin, Eure.

- 1074 TJ Poprawski (83-49). Adult, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Jul 1983. France: tree nursery containers, Les Thilliers-en-Vexin, Eure.
- 1075 TJ Poprawski (83-54). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 21 Jul 1983. France: tree nursery containers, Les Thilliers-en-Vexin, Eure.
- 1079 *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Acc'd Feb 1984. USA: Washington.
- 1081 L Allee. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1983. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1106 KV Deseö (25) ← Chianella. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Feb 1982. Italy: Sicily.
- 1153 TJ Poprawski (074). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Jan 1984. Morocco: Jramma.
- 1154 TJ Poprawski (072). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 25 Jan 1984. Morocco: Jramma.
- 1155 TJ Poprawski (073). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Jan 1984. Morocco: Jramma.
- 1156 TJ Poprawski (83-639). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. 22 Oct 1983. France: Guyancourt, Yvelines.
- 1157 TJ Poprawski (83-619). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1983. France: Senneville.
- 1158 TJ Poprawski (83-634). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Vernon, Eure.
- 1159 TJ Poprawski (83-615). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1983. France: Senneville.
- 1160 TJ Poprawski (83-614). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1983. France: Senneville.
- 1161 TJ Poprawski (83-626). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Mantes-la-Jolie, Yvelines.
- 1162 TJ Poprawski (83-623). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Limay, Yvelines.
- 1163 TJ Poprawski (071A). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Jan 1984. Morocco: Jramma.
- 1164 TJ Poprawski (070). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Jan 1984. Morocco: Jramma.
- 1165 TJ Poprawski (83-621). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1983. France: Senneville.
- 1167 TJ Poprawski (83-701). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Nov 1983. France: Senneville.
- 1168 TJ Poprawski (83-702). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. 10 Oct 1983. France: Senneville.
- 1169 TJ Poprawski (83-703). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Senneville.
- 1170 TJ Poprawski (83-704). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. 23 Nov 1983. France: Senneville.
- 1171 TJ Poprawski (A2). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1172 TJ Poprawski (A4). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1173 TJ Poprawski (A5). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 16 Feb 1984. Morocco: Achouria.
- 1174 TJ Poprawski (A6). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Feb 1984. Morocco: Achouria.
- 1175 TJ Poprawski (A7). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 10 Feb 1984. Morocco: Achouria.
- 1176 TJ Poprawski (J1). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Jan 1984. Morocco: Jorf.
- 1177 TJ Poprawski (J2). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Jan 1984. Morocco: Jorf.
- 1178 TJ Poprawski (J3). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 7 Feb 1984. Morocco: Jorf.
- 1179 TJ Poprawski (J4). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 2 Dec 1983. Morocco: Jorf.
- 1180 TJ Poprawski (J5). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 2 Dec 1983. Morocco: Jorf.
- 1181 TJ Poprawski (J6). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 10 Feb 1984. Morocco: Jorf.
- 1182 TJ Poprawski (83-616). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Senneville.
- 1183 TJ Poprawski (J7). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 16 Feb 1984. Morocco: Jorf.
- 1185 [INRA Bb-142] TJ Poprawski. *Sitona discoideus* [Coleoptera: Curculionidae]. May 1977. France: Viols-le-Fort, Hérault.
- 1186 [INRA Bb-195] TJ Poprawski. Adult, *Caryedon serratus* [Coleoptera: Bruchidae]. 6 Jun 1983. France: La Minière.
- 1188 TJ Poprawski (E1). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Feb 1984. Morocco: Elbaya.
- 1189 TJ Poprawski (A1). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Feb 1984. Morocco: Achouria.
- 1190 TJ Poprawski (A3). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Feb 1984. Morocco: Achouria.

- 1191 TJ Poprawski (645). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Dec 1983. France: Orléans, Loiret.
- 1192 TJ Poprawski (646). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Anet, Eure-et-Loir.
- 1193 TJ Poprawski (647). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Ecos, Eure.
- 1194 TJ Poprawski (648). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Dec 1983. France: Meulan, Yvelines.
- 1306 TJ Poprawski (83-611). Adult, *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1983. France: Senneville.
- 1309 TJ Poprawski (A8). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1311 TJ Poprawski (A10). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1312 TJ Poprawski (A11). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1313 TJ Poprawski (A12). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 1389 TJ Poprawski (088). Adult, *Hypera postica* [Coleoptera: Curculionidae]. 16 May 1984. France: Baron.
- 1398 TJ Poprawski (086). Adult, *Hypera postica* [Coleoptera: Curculionidae]. 16 May 1984. France: Marsanne, Drôme.
- 1399 TJ Poprawski (087). Adult, *Hypera postica* [Coleoptera: Curculionidae]. Mar 1984. France: Marsanne, Drôme.
- 1450 [CNPAF 52; CP 125] F Moscardi. *Sternechus sub-signatus* [Coleoptera: Curculionidae]. 27 Mar 1984. Brazil: Londrina, Paraná.
- 1453 [CNPAF 84-02-30-2; CP 143] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 30 Mar 1984. Brazil: Francisco Beltrão, Paraná.
- 1454 [CNPAF 84-03-28-1F; CP 144] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 28 Mar 1984. Brazil: Cascavel, Paraná.
- 1455 [CNPAF 84-03-28-D; CP 145] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 28 Mar 1984. Brazil: Cascavel, Paraná.
- 1456 [CNPAF 84-04-03-6A; CP 146] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 30 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1458 [CNPAF 84-03-28-1E; CP 148] RA Daoust. *Cerotoma* sp. [Coleoptera: Chrysomelidae]. 28 Mar 1984. Brazil: Cascavel, Paraná.
- 1459 [CNPAF 84-04-03-1E; CP 149] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 3 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1460 [CNPAF 84-04-03-1B; CP 150] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 3 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1461 [CNPAF 84-03-29-1; CP 151] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 29 Mar 1984. Brazil: Capitão Leônidas Marques, Paraná.
- 1462 [CNPAF 84-03-28-1G; CP 152] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 28 Mar 1984. Brazil: Cascavel, Paraná.
- 1463 [CNPAF 84-03-28-1L; CP 153] RA Daoust. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 28 Mar 1984. Brazil: Cascavel, Paraná.
- 1464 [CNPAF 84-04-03-6B; CP 154] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 3 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1465 [CNPAF 84-04-03-1A; CP 155] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 3 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1466 [CNPAF 84-03-31-6; CP 156] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 31 Mar 1984. Brazil: Sto. Antonio do Sudoeste, Paraná.
- 1467 [CNPAF 84-04-02-5A; CP 157] RA Daoust and BP Magalhães. *Cerotoma* sp. [Coleoptera: Chrysomelidae]. 2 Apr 1984. Brazil: São Carlos, Santa Catarina.
- 1469 [CNPAF 84-03-31-2; CP 159] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 31 Mar 1984. Brazil: Sto. Antonio do Sudoeste, Paraná.
- 1470 [CNPAF 84-04-02-3; CP 160] RA Daoust, BP Magalhães and M Pinat. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 2 Apr 1984. Brazil: Chapecó, Santa Catarina.
- 1471 [CNPAF 84-04-02-4; CP 161] RA Daoust, BP Magalhães and M Pinat. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 2 Apr 1984. Brazil: Chapecó, Santa Catarina.
- 1472 [CNPAF 84-04-02-2; CP 162] RA Daoust, BP Magalhães and M Pinat. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 2 Apr 1984. Brazil: Chapecó, Santa Catarina.
- 1473 [CNPAF 84-04-02-1B; CP 163] RA Daoust, BP Magalhães and M Pinat. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 2 Apr 1984. Brazil: Chapecó, Santa Catarina.

- 1475 [CNPAF 84-04-03-1C; CP 165] RA Daoust and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 3 Apr 1984. Brazil: Augusto Pestana (Ijuí), Rio Grande do Sul.
- 1476 [CNPAF 84-04-25-1; CP 166] SM dos Santos. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 25 Apr 1984. Brazil: CNPAF, Goiânia, Goiás.
- 1480 SB Alves (252). *Hypothenemus hampei* [Coleoptera: Scolytidae] on coffee. Rec'd 6 Jul 1984. Brazil: São Paulo.
- 1483 SB Alves (61). *Cosmopolites sordidus* [Coleoptera: Curculionidae] on banana. Rec'd 6 Jul 1984. Brazil: Espírito Santo.
- 1491 [INRA Bb-169] GG Soares. *Sitona humeralis* [Coleoptera: Curculionidae]. Mar 1981. France: Lusignan, Vienne.
- 1509 I Majchrowicz (56) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.
- 1510 I Majchrowicz (58) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.
- 1511 I Majchrowicz (75) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.
- 1515 TJ Poprawski (0107). Adult, *Hypera postica* [Coleoptera: Curculionidae]. 13 Jun 1984. France.
- 1518 TJ Poprawski (0111). Adult, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. 27 Jun 1984. France: Entraigues, Vaucluse.
- 1519 TJ Poprawski (0112). Adult, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. 27 Jun 1984. France: Entraigues, Vaucluse.
- 1559 KV Deseö (88) ← Campadelli. Larva, *Aromia moschata* [Coleoptera: Cerambycidae]. Feb 1984. Italy: Solarolo.
- 1560 KV Deseö (89) ← Campadelli. *Aromia moschata* [Coleoptera: Cerambycidae]. Feb 1984. Italy: Solarolo.
- 1561 KV Deseö (90) ← Campadelli. Larva, *Aromia moschata* [Coleoptera: Cerambycidae]. Feb 1984. Italy: Solarolo.
- 1562 KV Deseö (91) ← Campadelli. Larva, *Aromia moschata* [Coleoptera: Cerambycidae]. Feb 1984. Italy: Solarolo.
- 1563 KV Deseö (92) ← Campadelli. Larva, *Aromia moschata* [Coleoptera: Cerambycidae]. Feb 1984. Italy: Solarolo.
- 1566 S Keller (D155). [Coleoptera: Scolytidae]. 14 Aug 1984. Switzerland: Siblingen, Schaffhausen.
- 1619 L Allee. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 6 Aug 1984. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1620 L Allee. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 6 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1621 L Allee. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 6 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1622 L Allee. Larva, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 27 Jul 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1623 L Allee. Larva, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 27 Jul 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1624 L Allee. Larva, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 30 Jul 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1647 TJ Poprawski (0143). Adult, *Sitona* sp. [Coleoptera: Curculionidae]. 22 Aug 1984. France: Orval, Ardennes.
- 1678 M Shimazu (F-237). *Moechotypa diphysis* [Coleoptera: Cerambycidae]. Aug 1978. Japan: Tsushima, Nagasaki Prefecture.
- 1679 M Shimazu (F-263). *Monochamus alternatus* [Coleoptera: Cerambycidae]. 25 Aug 1978. Japan: Kumamoto Prefecture.
- 1683 M Shimazu (F-359(30)). *Anomala cuprea* [Coleoptera: Scarabaeidae]. 20 Nov 1980. Japan: Nagano Prefecture.
- 1704 L Allee (84-1). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Aug 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1705 L Allee (84-3). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1706 L Allee (84-4). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1707 L Allee (84-5). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Aug 1984. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1708 L Allee (84-7). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1709 L Allee (84-8). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.

- 1710 L Allee (84-9). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1711 L Allee (84-10). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 8 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1712 L Allee (84-11). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1713 L Allee (84-12). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1721 L Allee (84-13). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 17 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1722 L Allee (84-19). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 31 Aug 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1723 L Allee (84-20). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 31 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1749 L Allee (84-16). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 17 Aug 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1750 L Allee (84-18). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 31 Aug 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1775 L Allee (84-22). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1776 L Allee (84-23). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: control plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1777 L Allee (84-24). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: insecticide-treated plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1778 L Allee (84-25). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1779 L Allee (84-26). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: low rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1780 L Allee (84-27). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1781 L Allee (84-28). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Fall 1984. USA: high rate plot for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 1811 TJ Poprawski (0167C). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Jorf. Identification verified genomically.
- 1815 TJ Poprawski (0165). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Jorf.
- 1816 TJ Poprawski (0166A). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Hauteban.
- 1817 TJ Poprawski (0166B). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Hauteban.
- 1818 TJ Poprawski (0166C). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Hauteban.
- 1819 TJ Poprawski (0166D). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Hauteban.
- 1820 TJ Poprawski (0167A). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Jorf.
- 1821 TJ Poprawski (0167B). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. Acc'd 22 Jan 1985. Morocco: Jorf.
- 1833 SB Alves (267). *Cosmopolites* sp. [Coleoptera: Curculionidae]. Rec'd 21 Jan 1985. Brazil.
- 1848 HS Whitney (R629) ← HA Moeck. Adult, *Rhizophagus grandis* [Coleoptera: Rhizophagidae]. Sep 1984. Belgium. Identification verified genomically.
- 1849 HA Moeck and HS Whitney (R630). Adult, *Dendroctonus ponderosae* [Coleoptera: Scolytidae]. Oct 1984. Canada: Lye Lake Plot, Riske Creek, British Columbia.
- 1852 P Spencer and HS Whitney (R634). *Dryocoetes confusus* [Coleoptera: Scolytidae]. Jun 1984. Canada: Top of the World Park, British Columbia.
- 1853 HS Whitney (R636) ← HA Moeck. Larva, *Dendroctonus ponderosae* [Coleoptera: Scolytidae]. 5 Oct 1984. Canada: laboratory colony, British Columbia.
- 1854 HA Moeck and HS Whitney (R637). Adult, *Pytho* sp. [Coleoptera: Pythidae]. Oct 1984. Canada: Lye Lake Plot, Riske Creek, British Columbia.
- 1954 [CNPAF 85-7-23-1; CP 179] JC Lord and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 23 Jul 1985. Brazil: Santana do Ipanema, Alagoas.

- 1956 [CNPAF 85-7-22; CP 181] JC Lord and BP Magalhães. *Coleomegilla maculata* [Coleoptera: Coccinellidae]. 22 Jul 1985. Brazil: União dos Palmares, Alagoas.
- 1961 [CNPAF 85-7-24-4; CP 187] JC Lord and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 24 Jul 1985. Brazil: Ribeira do Pombal, Bahia.
- 1966 [CP 168] D Gabriel. *Anthonomus grandis* [Coleoptera: Curculionidae]. 1983. Brazil: Fazenda St. Genebra, Campinas, São Paulo.
- 1971 [ARSEF 1451 (deaccessioned); CNPAF 84-3-12; CP 124] H da Silva Coelho. [Coleoptera: Chrysomelidae]. 12 Mar 1984. Brazil: CNPAF, Goiânia, Goiás.
- 1975 TJ Poprawski (0178). Adult, [Coleoptera: Carabidae]. Acc'd 25 Sep 1985. France: Saint-Genis de Saintonge, Charente-Maritime.
- 1980 TJ Poprawski (0183). Adult, [Coleoptera]. Acc'd 25 Sep 1985. France: Saint-Genis de Saintonge, Charente-Maritime.
- 1982 TJ Poprawski (0185). Egg, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Acc'd 25 Sep 1985. France: La Repara.
- 2010 CIRPON ← M Yasem de Romero. *Cycloneura sanguinea* [Coleoptera: Coccinellidae]. 1984. Argentina: Tucumán.
- 2030 HS Whitney (CPB-1). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Oct 1985. USA: low rate plot (2) for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 2031 HS Whitney (CPB-2). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] in soil. Oct 1985. USA: low rate plot (2) for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 2032 HS Whitney (CPB-3). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] in soil. Oct 1985. USA: low rate plot (2) for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 2033 HS Whitney (LBB-multi). *Coccinella* sp. [Coleoptera: Coccinellidae]. Oct 1985. USA: low rate plot (2) for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 2034 HS Whitney (LBB-multi 2). *Coccinella* sp. [Coleoptera: Coccinellidae]. Oct 1985. USA: low rate plot (2) for ARSEF 252 spray tests, Agway Research Farm, Tully, New York.
- 2040 MC Rombach (171085-1) ← SB Ahn (E5-1). [Coleoptera: Curculionidae]. 17 Oct 1985. Republic of Korea.
- 2075 [CNPAF 85-7-24; CP 183] JC Lord and BP Magalhães. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 24 Jul 1985. Brazil: Ribeira do Pombal, Bahia.
- 2079 [CP 198] JC Lord and BP Magalhães. *Systema* sp. [Coleoptera: Chrysomelidae]. 1985. Brazil: CNPAF, Goiânia, Goiás.
- 2248 DA Rodriguez Sierra (106 Bb). *Premnotrypes vorax* [Coleoptera: Curculionidae]. Feb 1986. Colombia: Tibaitata, Mosquera, Nariño.
- 2249 DA Rodriguez Sierra (203 Bb). Adult, *Ancognatha scarabaeoides* [Coleoptera: Scarabaeidae]. Feb 1986. Colombia: Tibaitata, Mosquera, Nariño.
- 2250 DA Rodriguez Sierra (201 Bb). *Ancognatha scarabaeoides* [Coleoptera: Scarabaeidae]. Feb 1986. Colombia: Tibaitata, Mosquera, Nariño.
- 2270 BT Forschler (RF-2). Adult, *Cyrtepistomus castaneus* [Coleoptera: Curculionidae]. Sep 1986. USA: Robinson Forest, Univ. of Kentucky, Breathitt County, Kentucky.
- 2330 PI Espinosa Camarena. *Diabrotica virgifera* [Coleoptera: Chrysomelidae]. 1986. Mexico: Zapotlanejo, Jalisco.
- 2463 TJ Poprawski (8710). Adult, *Galerucina* sp. [Coleoptera: Chrysomelidae]. 2 Feb 1987. France: Béhoust, Yvelines.
- 2509 [CP 229] DR Sosa-Gómez. *Maecolaspis monrosi* [Coleoptera: Chrysomelidae]. 8 Apr 1986. Argentina: La Virginia, Tucumán.
- 2511 [CP 221] F Moscardi. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. Acc'd 8 Dec 1987. Brazil: CNPS, Londrina, Paraná.
- 2512 [CP 237] J Maria. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 29 Jun 1987. Brazil: Manaus, Amazonas.
- 2515 [CP 227] DR Sosa-Gómez. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 28 Mar 1986. Argentina: Blanco Pozo, Tucumán.
- 2520 [CP 222] F Moscardi. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 1983. Brazil: CNPS, Londrina, Paraná.
- 2557 S Sandoval (95). Adult, [Coleoptera: Cerambycidae]. Acc'd 18 Mar 1988. Ecuador.
- 2559 [ARSEF 2638; CP 230] SB Alves (290). *Anthonomus grandis* [Coleoptera: Curculionidae]. Acc'd 13 Apr 1988. Brazil: ESALQ, Piracicaba, São Paulo.
- 2579 JJ Jackson. *Diabrotica barberi* [Coleoptera: Chrysomelidae]. 18 Jul 1988. USA: laboratory colony, Brookings, South Dakota.
- 2580 MD Bryan. Adult, *Coccinella septempunctata* [Coleoptera: Coccinellidae]. Jul 1988. USA: laboratory cages, field collected population, Niles, Michigan.
- 2625 [CNPAF 88-5-6; CP 240] DW Roberts ← EC de Moura. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 6 May 1988. Brazil: CNPAF, Goiânia, Goiás.
- 2626 [CNPAF 88-5-6A; CP 241] DW Roberts ← EC de Moura. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 6 May 1988. Brazil: CNPAF, Goiânia, Goiás.

- 2638 [ARSEF 2559; CP 230] DW Roberts ← SB Alves (290). *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1988. Brazil: ESALQ, Piracicaba, São Paulo.
- 2639 DW Roberts ← SB Alves (292). *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1988. Brazil: ESALQ, Piracicaba, São Paulo.
- 2642 DW Roberts ← SB Alves (695). *Metamasius hemipterus* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1988. Brazil: Londrina, Paraná.
- 2676 WA Gardner and RD Harrison. Adult, *Curculio caryae* [Coleoptera: Curculionidae] on pecan. 25 Aug 1988. USA: Griffin, Georgia.
- 2685 [IMI 327908] C Prior (Kenya 1). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Kenya.
- 2686 [IMI 327909] C Prior (Kenya 2). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Kenya.
- 2687 [IMI 330194] C Prior (Kenya 3). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Kenya.
- 2688 [IMI 327910] C Prior (Togo 1). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Togo.
- 2689 [IMI 329064] C Prior (Togo 2). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Togo.
- 2690 [IMI 329065] C Prior (Togo 3). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Togo.
- 2691 [IMI 329066] C Prior (Togo 4). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Togo.
- 2692 [IMI 329067] C Prior (Togo 5). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Togo.
- 2693 [IMI 327906] C Prior. *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 19 Mar 1989. Mexico.
- 2695 Abbott Laboratories (89-201). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 24 Mar 1989. Commonwealth of Independent States.
- 2938 [CP 270] SP Wraight ← R da Silva Carvalho. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 8 Nov 1988. Brazil: CNPAF, Goiânia, Goiás.
- 2942 [CP 274] SP Wraight ← MGA de Lima. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 28 Nov 1988. Brazil: CNPAF, Goiânia, Goiás.
- 2945 [CP 290] SP Wraight ← SB Alves. *Anthonomus grandis* [Coleoptera: Curculionidae]. 1988. Brazil: Piracicaba, São Paulo.
- 2946 [CP 281] SP Wraight ← SB Alves. *Anthonomus grandis* [Coleoptera: Curculionidae]. 1988. Brazil: Piracicaba, São Paulo.
- 2961 CENARGEN (CG 165). *Lagria vilosa* [Coleoptera: Lagriidae]. Rec'd 14 Mar 1990. Brazil: Formosa, Goiás.
- 2983 T Searle (CW1). Adult, *Listronotus oregonensis* [Coleoptera: Curculionidae]. 1988. Canada: Saint-Jean, Québec.
- 2984 T Searle (CW2). Adult, *Listronotus oregonensis* [Coleoptera: Curculionidae]. 1988. Canada: Saint-Jean, Québec.
- 2985 T Searle (CW3). Adult, *Listronotus oregonensis* [Coleoptera: Curculionidae]. 1989. Canada: Saint-Jean, Québec.
- 2986 T Searle (CW4). Adult, *Listronotus oregonensis* [Coleoptera: Curculionidae]. 1989. Canada: Saint-Jean, Québec.
- 2987 T Searle (LD1). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Summer 1988. Canada: Sainte-Clotilde, Québec.
- 2988 T Searle (LD2). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Summer 1988. Canada: Sainte-Clotilde, Québec.
- 2989 T Searle (LD3). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Summer 1988. Canada: Sainte-Clotilde, Québec.
- 2990 T Searle (LD4). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Summer 1988. Canada: Sainte-Clotilde, Québec.
- 2991 T Searle (LD5). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Summer 1988. Canada: Sainte-Clotilde, Québec.
- 3037 W Mechaber (weevil#2354). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Gaylussacia baccata*. 20 May 1990. USA: Carver, Massachusetts.
- 3040 WE Jones (SHB). [Coleoptera: Scolytidae] inside macadamia nut kernel. May 1990. USA: Kona, Island of Hawaii, Hawaii.
- 3055 [MAF F6] T Glare. *Costelytra zealandica* [Coleoptera: Scarabaeidae]. Rec'd Oct 1990. New Zealand: South Island. Presumtive ID; no conidia or raches seen.
- 3063 [MAF F13] T Glare. *Sitona* sp. [Coleoptera: Curculionidae]. Rec'd Oct 1990. New Zealand: South Island.
- 3065 [MAF F28] T Glare. *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd Oct 1990. New Zealand: South Island.
- 3066 [MAF F29] T Glare. *Paropsis charybdis* [Coleoptera: Chrysomelidae]. Rec'd Oct 1990. New Zealand: South Island.
- 3070 [MAF F33] T Glare. *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. Rec'd Oct 1990. New Zealand: Christchurch, South Island.
- 3097 Fermone Corporation (FCI-7744). *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd 18 Oct 1990. USA: Rio Grande Valley, Texas. **RESTRICTED ACCESS:** contact Curator.
- 3098 L Loch ← G Albuquerque. *Oryzophagus oryzae* [Coleoptera: Curculionidae] on rice. Rec'd 29 Oct 1990. Brazil: Pôrto Alegre, Rio Grande do Sul.
- 3111 DW Watson (P 89) ← L Meinke. *Diabrotica virgifera* [Coleoptera: Chrysomelidae]. 13 Sep 1990. USA: Mead, Nebraska.

- 3112 JK Cawthra and CJ Geden (P 89). [Coleoptera: Staphylinidae] originally from beef feed lot. 10 Sep 1990. USA: laboratory colony, Lincoln, Nebraska.
- 3197 GW Riethmacher (Bet1). [Coleoptera] on potatoes. 12 Oct 1990. Philippines: La Trinidad, Benguet.
- 3198 GW Riethmacher (Bet2). [Coleoptera] on potatoes. 12 Oct 1990. Philippines: La Trinidad, Benguet.
- 3199 GW Riethmacher (Bet3). [Coleoptera] on potatoes. 12 Oct 1990. Philippines: La Trinidad, Benguet.
- 3219 [CP 478(479?)] DW Roberts ← JM Gomes. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Rec'd 8 Feb 1991. Brazil.
- 3287 J Gutierrez Samperio (3) ← ERD Reyes. *Diabrotica* sp. [Coleoptera: Chrysomelidae] on corn. 1988. Mexico: Colima.
- 3309 J Gutierrez Samperio (25) ← ERD Reyes. *Diabrotica balteata* [Coleoptera: Chrysomelidae] on corn. 1990. Mexico: Colima.
- 3310 J Gutierrez Samperio (26) ← ERD Reyes. *Geraeus senilis* [Coleoptera: Curculionidae] on corn. 1990. Mexico: Comala, Colima.
- 3311 J Gutierrez Samperio (27) ← ERD Reyes. *Geraeus senilis* [Coleoptera: Curculionidae] on corn. 1990. Mexico: Colima.
- 3386 I Majchrowicz (23). [Coleoptera: Carabidae] nr. potato plants. 3 Jul 1991. USA: garden nr. USDA laboratory, Yakima, Washington.
- 3403 MS Goettel. *Ceutorhynchus litura* [Coleoptera: Curculionidae]. Rec'd 6 Mar 1992. Location not specified.
- 3437 [CATIE 1] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Rec'd 28 Oct 1991. Costa Rica: Turrialba, Cartago.
- 3438 [CATIE 2] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3439 [CATIE 3] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3440 [CATIE 4] TG Zoebisch. *Hypothenemus hampei* [Coleoptera: Scolytidae] on *Coffea arabica*. Rec'd 28 Oct 1991. Nicaragua: Managua.
- 3441 [CATIE 5] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3442 [CATIE 6] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3443 [CATIE 7] TG Zoebisch. *Hypothenemus hampei* [Coleoptera: Scolytidae] on *Coffea arabica*. Rec'd 28 Oct 1991. Nicaragua: Managua.
- 3444 [CATIE 8] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3445 [CATIE 9] TG Zoebisch. *Hypothenemus hampei* [Coleoptera: Scolytidae] on *Coffea arabica*. Rec'd 28 Oct 1991. Nicaragua: Managua.
- 3446 [CATIE 10] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Aug 1991. Costa Rica: Turrialba, Cartago.
- 3447 [CATIE 11] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Jul 1991. Costa Rica: Turrialba, Cartago.
- 3448 [CATIE 12] TG Zoebisch. *Hypothenemus hampei* [Coleoptera: Scolytidae] on *Coffea arabica*. Rec'd 28 Oct 1991. Nicaragua: Managua.
- 3450 [CATIE 14] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Jul 1991. Costa Rica: Turrialba, Cartago.
- 3451 [CATIE 15] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Jul 1991. Costa Rica: Turrialba, Cartago.
- 3452 [CATIE 16] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Jul 1991. Costa Rica: Turrialba, Cartago.
- 3453 [CATIE 17] TG Zoebisch. *Hypothenemus hampei* [Coleoptera: Scolytidae] on *Coffea arabica*. Rec'd 28 Oct 1991. Nicaragua: Managua.
- 3455 [CATIE 19] TG Zoebisch. *Notonata* sp. [Coleoptera: Chrysomelidae] on *Bixa orellana*. Jul 1991. Costa Rica: Turrialba, Cartago.
- 3457 [CATIE 21] TG Zoebisch. [Coleoptera: Languriidae] on *Macadamia integrifolia*. Sep 1991. Costa Rica: Turrialba, Cartago.
- 3534 SM DeFazio and PD McKown (C-7). *Coccinella septempunctata* [Coleoptera: Coccinellidae]. Nov 1991. Location not specified.
- 3667 AE Hajek (BFMS). [Coleoptera: Curculionidae]. Apr 1991. USA: New York.
- 3716 RA LeBrun ← J Hanula (C-2). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. Summer 1992. Location not specified.
- 3717 RA LeBrun ← J Hanula (C-3). *Popillia japonica* [Coleoptera: Scarabaeidae]. Summer 1991. Location not specified.
- 3818 ERD Reyes (BbCO1). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae] coffee. 9 Oct 1992. Mexico: Oaxaca.
- 3819 ERD Reyes (BbCO2). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae] on coffee. 9 Oct 1992. Mexico: Oaxaca.
- 4001 [A Mesquita] LA Lacey (93038). *Crimissa cruralis* [Coleoptera: Chrysomelidae]. 3 May 1993. Brazil: Pacajus, Ceará.
- 4013 T Steenberg (195) ← A Kirkeby-Thomse. *Sitona lineatus* [Coleoptera: Curculionidae]. Sep 1993. Denmark: Copenhagen, Tåstrup, Zealand.
- 4015 T Steenberg (196) ← HP Ravn. *Sitona lineatus* [Coleoptera: Curculionidae]. Sep 1989. Denmark: Falster, Storstrøm.

- 4016 T Steenberg (201) ← V Langer. *Sitona lineatus* [Coleoptera: Curculionidae] on white clover. Mar 1990. Denmark: Ringsted, Zealand.
- 4018 T Steenberg (202) ← J Eilenberg. *Coccinella septempunctata* [Coleoptera: Coccinellidae]. Mar 1990. Denmark: Jægerspris, Zealand.
- 4019 T Steenberg (205) ← HP Ravn. *Sitona lineatus* [Coleoptera: Curculionidae]. Mar 1990. Denmark.
- 4021 T Steenberg (212) ← HP Ravn. *Sitona lineatus* [Coleoptera: Curculionidae] on pea. Jul 1990. Denmark: Pajbjerg, Jutland.
- 4023 T Steenberg (217). *Apion* sp. [Coleoptera: Curculionidae] on alfalfa. Oct 1990. Denmark: Copenhagen, Tåstrup, Zealand.
- 4028 T Steenberg (233) ← CW Riedel. *Tachyporus* sp. [Coleoptera: Staphylinidae]. Jan 1991. Denmark: Svanholm, Zealand.
- 4031 T Steenberg (237) ← CW Riedel. *Amara plebeja* [Coleoptera: Carabidae]. Jan 1991. Denmark: Foulum, Jutland.
- 4032 T Steenberg (238) ← CW Riedel. *Bembidion lampros* [Coleoptera: Carabidae]. Jan 1991. Denmark: Svanholm, Zealand.
- 4034 T Steenberg (240). *Amara familiaris* [Coleoptera: Carabidae]. Mar 1991. Denmark: Copenhagen, Tåstrup, Zealand.
- 4038 T Steenberg (253). *Hypera postica* [Coleoptera: Curculionidae]. Oct 1991. Denmark: Copenhagen, Tåstrup, Zealand.
- 4041 T Steenberg (261). *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1991. Denmark: Copenhagen, Tåstrup, Zealand.
- 4046 T Steenberg (276) ← V Langer. *Anotylus* sp. [Coleoptera: Staphylinidae]. Nov 1991. Denmark: Copenhagen, Tåstrup, Zealand.
- 4049 T Steenberg (298). *Hypera postica* [Coleoptera: Curculionidae]. Mar 1992. Denmark: Copenhagen, Tåstrup, Zealand.
- 4051 T Steenberg (349). *Anotylus rugosus* [Coleoptera: Staphylinidae]. Nov 1992. Denmark: Brøndrup, Fyn.
- 4052 T Steenberg (355). [Coleoptera: Curculionidae]. Oct 1992. Denmark: Copenhagen, Tåstrup, Zealand.
- 4054 T Steenberg (359). *Gyrohypnus angustatus* [Coleoptera: Staphylinidae]. Oct 1992. Denmark: Copenhagen, Tåstrup, Zealand.
- 4055 T Steenberg (362). [Coleoptera: Staphylinidae]. Oct 1992. Denmark: Brøndrup, Fyn.
- 4056 T Steenberg (365). *Anotylus rugosus* [Coleoptera: Staphylinidae]. Oct 1992. Denmark: Brøndrup, Fyn.
- 4130 [DAT 7; RJ Milner F11] AC Rath (F007). *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 12 Jul 1979. Australia: Guyra, New South Wales.
- 4135 [DAT 15] AC Rath (F015). Larva, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 9 Mar 1986. Australia: Laboratory, Newtown, Tasmania.
- 4136 [DAT 17] AC Rath (F017). Larva, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 9 Mar 1986. Australia: Laboratory, Newtown, Tasmania.
- 4274 [DAT 143] AC Rath (F143). Adult, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 23 Jun 1989. Australia: Glen Morey, Woodbury, Tasmania.
- 4382 LA Lacey (94140) ← CAAS (93.1). [Coleoptera]. 7 May 1994. Location not specified.
- 4721 [DAT 140] AC Rath (F140). Adult, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. Spring 1989. Australia: Glen Morey, Woodbury, Tasmania.
- 4798 J Brito (7A). *Cosmopolites sordidus* [Coleoptera: Curculionidae]. Rec'd 14 Oct 1994. West Africa: Cape Verde Islands.
- 4799 J Brito (14A). *Cosmopolites sordidus* [Coleoptera: Curculionidae]. Rec'd 14 Oct 1994. West Africa: Cape Verde Islands.
- 4973 J McManus (HcBbV64 2p). Adult, *Hippodamia convergens* [Coleoptera: Coccinellidae]. Rec'd 30 Oct 1995. USA: Laboratory conditions, Ithaca, New York.
- 4974 J McManus (HcBbF66.1 2p). Adult, *Hippodamia convergens* [Coleoptera: Coccinellidae]. 19 Oct 1995. USA: Laboratory conditions, Ithaca, New York.
- 4975 J McManus (HcBbF66.2 2p). Adult, *Hippodamia convergens* [Coleoptera: Coccinellidae]. 19 Oct 1995. USA: Laboratory conditions, Ithaca, New York.
- 5070 LA Lacey (95062). *Tomicus minor* [Coleoptera: Scolytidae]. 5 Oct 1995. France: Lodéve, Hérault.
- 5071 LA Lacey (95063). *Tomicus minor* [Coleoptera: Scolytidae]. 5 Oct 1995. France: Lodéve, Hérault.
- 5072 LA Lacey (95064). [Coleoptera: Cerambycidae]. 6 Oct 1995. France: Lodéve, Hérault.
- 5148 DL Hostetter (T090). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae] soil, pasture. 29 Jan 1996. Portugal: Terceira Island, Azores.
- 5150 DL Hostetter (T103). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae] soil, pasture. 29 Jan 1996. Portugal: Terceira Island, Azores.
- 5195 RA LeBrun. Larva, *Lilioceris lilii* [Coleoptera: Chrysomelidae]. Rec'd 20 May 1996. URI.
- 5286 SARL (155) ← TJ Poprawski ← ARSEF (252). *Lepitinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Rec'd 9 Aug 1996. Location not specified.
- 5436 TJ Poprawski (TJP901) ← G Mercadier (EBCL 97001). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.
- 5437 TJ Poprawski (TJP902) ← G Mercadier (EBCL 97002). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.
- 5438 TJ Poprawski (TJP903) ← G Mercadier (EBCL 97003). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.

- 5439 TJ Poprawski (TJP904) ← G Mercadier (EBCL 97004). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.
- 5440 TJ Poprawski (TJP905) ← G Mercadier (EBCL 97005). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.
- 5441 TJ Poprawski (TJP906) ← G Mercadier (EBCL 97027). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 9 Jan 1997. Ivory Coast: RCI.3, Ayenoua.
- 5442 TJ Poprawski (TJP907) ← G Mercadier (EBCL 97028). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5443 TJ Poprawski (TJP908) ← G Mercadier (EBCL 97016). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5444 TJ Poprawski (TJP909) ← G Mercadier (EBCL 97017). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5445 TJ Poprawski (TJP910) ← G Mercadier (EBCL 97018). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5446 TJ Poprawski (TJP911) ← G Mercadier (EBCL 97019). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5447 TJ Poprawski (TJP912) ← G Mercadier (EBCL 97020). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5448 TJ Poprawski (TJP913) ← G Mercadier (EBCL 97021). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5449 TJ Poprawski (TJP914) ← G Mercadier (EBCL 97022). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5450 TJ Poprawski (TJP915) ← G Mercadier (EBCL 97023). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5451 TJ Poprawski (TJP916) ← G Mercadier (EBCL 97024). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5452 TJ Poprawski (TJP917) ← G Mercadier (EBCL 97025). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5453 TJ Poprawski (TJP918) ← G Mercadier (EBCL 97026). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5454 TJ Poprawski (TJP919) ← G Mercadier (EBCL 97011). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5455 TJ Poprawski (TJP920) ← G Mercadier (EBCL 97012). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5456 TJ Poprawski (TJP921) ← G Mercadier (EBCL 97013). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5457 TJ Poprawski (TJP922) ← G Mercadier (EBCL 97014). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5458 TJ Poprawski (TJP923) ← G Mercadier (EBCL 97015). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5459 TJ Poprawski (TJP924) ← G Mercadier (EBCL 97029). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5460 TJ Poprawski (TJP925) ← G Mercadier (EBCL 97030). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5465 TJ Poprawski (TJP930). Overwintering adult, *Galerucella sp.* [Coleoptera: Chrysomelidae]. Rec'd 9 May 1997. USA: USDA-APHIS-PPQ Biocontrol Laboratory, Mission, Texas.
- 5477 G Mercadier (EBCL 97006). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 10 Jan 1997. Ivory Coast: RCI.5, Abengourou.
- 5478 G Mercadier (EBCL 97007). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 26 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5479 G Mercadier (EBCL 97008). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 26 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5480 G Mercadier (EBCL 97009). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 26 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5481 G Mercadier (EBCL 97010). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 26 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5482 G Mercadier (EBCL 97032). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 9 Jan 1997. Ivory Coast: RCI.3, Ayenoua.
- 5483 G Mercadier (EBCL 97033). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 9 Jan 1997. Ivory Coast: RCI.3, Ayenoua.
- 5484 G Mercadier (EBCL 97034). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.6, Toumbokri.
- 5485 G Mercadier (EBCL 97036). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5486 G Mercadier (EBCL 97037). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5487 G Mercadier (EBCL 97038). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi.
- 5488 G Mercadier (EBCL 97039). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5489 G Mercadier (EBCL 97040). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.

- 5490 G Mercadier (EBCL 97041). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 24 Jan 1997. Togo: T.3, Gbadi-Gaodo.
- 5501 C López Lastra ← G Dalbello (#7). *Xanthogaleruca luteola* [Coleoptera: Chrysomelidae] on *Ulmus* sp. . 1994. Argentina: La Plata, Buenos Aires.
- 5533 SP Wraight. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 5 Jul 1997. USA: Homer Thompson Farm, potato variety test plots of Ward M. Tingey, Freeville, New York.
- 5534 SP Wraight. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 5 Jul 1997. USA: Homer Thompson Farm, potato variety test plots of Ward M. Tingey, Freeville, New York.
- 5535 SP Wraight. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 5 Jul 1997. USA: Homer Thompson Farm, potato variety test plots of Ward M. Tingey, Freeville, New York.
- 5536 SP Wraight. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 5 Jul 1997. USA: Homer Thompson Farm, potato variety test plots of Ward M. Tingey, Freeville, New York.
- 5537 SP Wraight. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 5 Jul 1997. USA: Homer Thompson Farm, potato variety test plots of Ward M. Tingey, Freeville, New York.
- 5553 LK Rieske-Kinney. *Odontota dorsalis* [Coleoptera: Chrysomelidae]. Rec'd 14 Oct 1997.
- 5623 I Vänninen (SF86-9). Larva, *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 28 Aug 1986. Finland: Närpiö, Vaasan Lääni.
- 5668 BL Parker (SPT-010). [Coleoptera]. 18 Jan 1998. Turkey: Hurbit Mountain, Hatay.
- 5669 BL Parker (SPT-018). [Coleoptera: Scarabaeidae]. 19 Jan 1998. Turkey: Karadao Mountain, Yavuzeli, Gaziantep.
- 5670 BL Parker (SPT-019). [Coleoptera: Elateridae]. 19 Jan 1998. Turkey: Karadao Mountain, Yavuzeli, Gaziantep.
- 5740 MCHCA Bernal (BbGC1). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. Rec'd Jun 1998. Mexico: Colima.
- 5741 MCHCA Bernal (BbGC2). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. Aug 1994. Mexico: Ocotlán, Jalisco.
- 5742 MCHCA Bernal (BbGC5). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. Aug 1994. Mexico: Ocotlán, Jalisco.
- 5743 MCHCA Bernal (BbGC8). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. 1995. Mexico: Zapotitlán, Jalisco.
- 5744 MCHCA Bernal (BbGC9). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. 1995. Mexico: Zapotitlán, Jalisco.
- 5745 MCHCA Bernal (BbGC11). *Phyllophaga* sp. [Coleoptera: Scarabaeidae]. Oct 1996. Mexico: Cofradía de la luz, Jalisco.
- 5807 B Broadbent (BB001). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] from laboratory colony, Agriculture and Agri-Food Canada. 22 Jul 1996. Canada: London, Ontario.
- 5813 LS Bauer. Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] from laboratory colony, USDA Forest Service, NCRS. Rec'd 20 Aug 1998. USA: East Lansing, Michigan.
- 5836 T Steenberg (SSL 6). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from adult *Sitona lineatus* [Coleoptera: Curculionidae].
- 5838 T Steenberg (SSL 25). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from an unidentified mite [Arachnida: Acari].
- 5839 T Steenberg (SSL 27). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from *Tachyporus* spp. [Coleoptera: Staphylinidae].
- 5840 T Steenberg (SSL 28). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from unidentified curculionid beetle [Coleoptera: Curculionidae].
- 5843 T Steenberg (SSL 55). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated *Anotylus* spp. [Coleoptera: Staphylinidae].
- 5857 T Steenberg (SSL 608). Adult, *Ahasverus advena* [Coleoptera: Cucujidae: Silvaninae]. Feb 1997. Denmark: Broiler house, Hesselager, Funen.
- 5979 JL Stimac (UF 5782). [Coleoptera]. Sep 1988. USA: Gainesville, Florida.
- 5981 JL Stimac (UF 5792). *Cylas formicarius elegantulus* [Coleoptera: Curculionidae: Apioninae]. Jan 1990. USA: Homestead, Florida.
- 5982 JL Stimac (UF 5820). *Cylas formicarius elegantulus* [Coleoptera: Curculionidae: Apioninae]. Rec'd 23 Nov 1998. Peru: Carabayllo.
- 5983 JL Stimac (UF 5822). *Premnotryes latithorax* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1998. Peru: Huancayo, Junín.
- 5984 JL Stimac (UF 5823). *Premnotryes latithorax* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1998. Peru: Huamachuco, La Libertad.
- 5986 JL Stimac (UF 5849). *Metamasius callizona* [Coleoptera: Curculionidae]. Rec'd 23 Nov 1998. USA: Gainesville, Florida.
- 5997 KT Hodge. Adult, *Ortholeptura valida* [Coleoptera: Cerambycidae] in leaf litter. 22 Oct 1998. USA: McDonald Forest, Oak Creek entrance, Benton County, Oregon. Specimen deposited in Oregon State University Herbarium as 67890.

- 6055 BL Parker (SPT-U-250). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6057 BL Parker (SPT-U-253). Adult, [Coleoptera: Tenebrionidae]. 16 Jan 1999. Uzbekistan: SW of Sazagan, Sazagan.
- 6058 BL Parker (SPT-U-254). Adult, [Coleoptera: Scarabaeidae]. 16 Jan 1999. Uzbekistan: Site d, SW of Samarkand, Mirankul region.
- 6059 BL Parker (SPT-U-255). Pupa, [Coleoptera: Carabidae]. 16 Jan 1999. Uzbekistan: Site d, SW of Samarkand, Mirankul region.
- 6061 BL Parker (SPT-U-261). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6062 BL Parker (SPT-U-262). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6063 BL Parker (SPT-U-263). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6064 BL Parker (SPT-U-264). Adult, [Coleoptera: Tenebrionidae]. 13 Jan 1999. Uzbekistan: GPS coordinates - N 40°50.450', E 069°56.680'.
- 6074 BL Parker (SPT-U-293). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6075 BL Parker (SPT-U-294). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6077 BL Parker (SPT-U-305). Adult, [Coleoptera: Tenebrionidae]. 16 Jan 1999. Uzbekistan: Site d, SW of Samarkand, Mirankul region.
- 6078 BL Parker (SPT-U-308). Adult, [Coleoptera: Tenebrionidae]. 16 Jan 1999. Uzbekistan: Site d, SW of Samarkand, Mirankul region.
- 6092 BL Parker (SPT-U-323). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6095 BL Parker (SPT-U-335). Adult, [Coleoptera: Coccinellidae]. 17 Jan 1999. Uzbekistan: GPS coordinates - N 39°53.843', E 067°41.643'.
- 6096 BL Parker (SPT-U-338). Adult, [Coleoptera: Tenebrionidae]. Jan 1999. Uzbekistan: GPS coordinates - N 39°26.295', E 067°20.041'.
- 6099 BL Parker (SPT-U-354/2). Adult, [Coleoptera: Carabidae]. 13 Jan 1999. Uzbekistan: GPS coordinates - N 40°50.450', E 069°56.680'.
- 6111 BL Parker (SPT-U-295). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6112 BL Parker (SPT-U-296). Adult, [Coleoptera: Coccinellidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6113 BL Parker (SPT-U-297). Adult, [Coleoptera: Tenebrionidae]. 16 Jan 1999. Uzbekistan: SW of Samarkand, Sazagan.
- 6216 AE Hajek (5B). Adult, [Coleoptera: Curculionidae]. Jun 1998. USA: Yellow Barn State Forest, Dryden, New York.
- 6217 AE Hajek (6B). Adult, [Coleoptera: Curculionidae]. Jun 1998. USA: Yellow Barn State Forest, Dryden, New York.
- 6387 TL Dubois (T7 (2) (2)) ← MT Smith. Larva, early instar, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] on twig. May 1998. PR China.
- 6390 TL Dubois (HF 2 c 1). Egg, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] on *Populus* sp. 8 Aug 1999. PR China: Anhui.
- 6391 TL Dubois (ST 1 # 1 (1)) ← SM Smith ← SA Teale. Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] on twigs of *Acer* sp. 2 Jul 1997. USA: Laboratory colony, SUNY College of Environmental Science and Forestry, Syracuse, New York. Laboratory colony started from host originally obtained from infested maple wood collected in New York, New York, USA 29 April 1997.
- 6393 TL Dubois (VD 12 rep b) ← V D'Amico. Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. Rec'd 22 Dec 1999. USA: Laboratory colony, USDA Forest Service, Ansonia, Connecticut.
- 6471 SR Grugel. *Dectes texanus* [Coleoptera: Cerambycidae]. 3 Nov 1998. USA: Goodland, Kansas.
- 6478 BL Parker (SPT-KZ-375). Adult, [Coleoptera: Tenebrionidae] overwintering in soil. 3 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.534' E 076°36.541'. **RESTRICTED ACCESS:**
- contact Curator*
- 6483 BL Parker (SPT-KZ-406). Adult, [Coleoptera: Tenebrionidae] overwintering in soil. 5 Feb 2000. Kazakhstan: GPS Coordinates N 44°13.034' E 077°41.315'. **RESTRICTED ACCESS:**
- contact Curator*
- 6499 BL Parker (SPT-KR-452). Adult, [Coleoptera: Buprestidae] overwintering in soil. 11 Feb 2000. Kyrgyz Republic: GPS Coordinates N 43°40.597' E 075°02.855'. **RESTRICTED ACCESS:**
- contact Curator*
- 6526 FE Vega (EBCL 99046). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6527 FE Vega (EBCL 99048). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6528 FE Vega (EBCL 99055). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6529 FE Vega (EBCL 99057). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.

- 6530 FE Vega (EBCL 99059). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6531 FE Vega (EBCL 99070). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6532 FE Vega (EBCL 99071). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jun 2000. Cameroon: Nkolbisson, Centre-Sud.
- 6552 D Chandler (HRI 342.92). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 13 Jul 2000. United Kingdom.
- 6559 D Chandler (HRI 386.93). [Coleoptera]. Rec'd 13 Jul 2000. United Kingdom.
- 6560 D Chandler (HRI 397.93). [Coleoptera]. Rec'd 13 Jul 2000. United Kingdom.
- 6669 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Harae, Northern Shoa.
- 6676 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Dedeaa, Northern Shoa.
- 6681 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Berber, Northern Shoa.
- 6686 Larva, [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Tikur Inchhini, Western Shoa.
- 6689 [Coleoptera: Carabidae]. Rec'd 17 Jan 2001. Ethiopia: Awassa, Sidamo.
- 6692 Adult, [Coleoptera]. Rec'd 17 Jan 2001. Ethiopia: Weldiya, Welo.
- 6693 Adult, [Coleoptera]. Rec'd 17 Jan 2001. Ethiopia: Debre Markos, Gojam.
- 6695 Adult, [Coleoptera]. Rec'd 17 Jan 2001. Ethiopia: Ashengae, Tigray.
- 6696 Adult, [Coleoptera]. Rec'd 17 Jan 2001. Ethiopia: Ashengae, Tigray.
- 6697 Adult, [Coleoptera]. Rec'd 17 Jan 2001. Ethiopia: Ashengae, Tigray.
- 6721 JM Sung (KECF-6200). [Coleoptera: Cerambycidae]. 25 Oct 2000. Republic of Korea: Mt. Daeyong, Chuncheon, Gangwon-do.
- 6884 G Neumann (HDM 1). *Otiorhynchus ligustici* [Coleoptera: Curculionidae]. 23 Mar 2001. Hungary: alfalfa field, Hódmezővásárhely, Csongrád.
- 6885 G Neumann (HDM 2). *Otiorhynchus ligustici* [Coleoptera: Curculionidae]. 23 Mar 2001. Hungary: alfalfa field, Hódmezővásárhely, Csongrád.
- 6900 I Klingen (NCRI 2/01/Bb). Imago, *Ips stenographus* [Coleoptera: Scolytidae]. 23 Apr 2001. Norway: Sem, Asker, Akershus. **RESTRICTED ACCESS: contact Curator.**
- 6903 M Ghazavi (1). Pupa, *Rhynchophorus ferrugineus* [Coleoptera: Curculionidae]. 1 Jun 2000. Iran: Saravan, Sistan Va Baluchestan.
- 6986 LA Castrillo (NY-1). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Jul 2000. USA: Homer C. Thompson Vegetable Research Farm, potato test plots of W. M. Tingey, Freeville, New York.
- 6987 LA Castrillo (NY-5). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Jul 2000. USA: Homer C. Thompson Vegetable Research Farm, potato test plots of W. M. Tingey, Freeville, New York.
- 6988 LA Castrillo (NY-11). Adult, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Jul 2000. USA: Homer C. Thompson Vegetable Research Farm, potato test plots of W. M. Tingey, Freeville, New York.
- 7152 H Liu (MSUFS-001). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 5 Feb 2002. USA: Ravenswood, Chicago, Illinois.
- 7153 H Liu (MSUFS-002). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 5 Feb 2002. USA: Ravenswood, Chicago, Illinois.
- 7154 H Liu (MSUFS-003). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 5 Feb 2002. USA: Ravenswood, Chicago, Illinois.
- 7155 H Liu (MSUFS-004). 5th instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. Apr 2002. PR China: Baiyin County, Gansu Province.
- 7156 H Liu (MSUFS-005). 3rd instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 12 Apr 2002. PR China: Wuji County, Hebei Province.
- 7157 H Liu (MSUFS-006). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 12 Apr 2002. PR China: Wuji County, Hebei Province.
- 7158 H Liu (MSUFS-007). 4th instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 31 May 2002. USA: New York, New York.
- 7159 H Liu (MSUFS-008). Pupa, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 31 May 2002. USA: New York, New York.
- 7160 H Liu (MSUFS-009). Adult, *Plectrodera scalator* [Coleoptera: Cerambycidae] from laboratory colony. 18 Dec 2001. USA: East Lansing, Michigan.
- 7161 H Liu (MSUFS-011). Adult, *Plectrodera scalator* [Coleoptera: Cerambycidae] from laboratory colony. 16 Jul 2002. USA: East Lansing, Michigan.
- 7162 H Liu (MSUFS-012). Adult, *Monochamus scutellatus* [Coleoptera: Cerambycidae]. 16 Jul 2002. USA: East Lansing, Michigan.
- 7163 H Liu (MSUFS-013). Adult, *Monochamus scutellatus* [Coleoptera: Cerambycidae]. 16 Jul 2002. USA: East Lansing, Michigan.
- 7164 H Liu (MSUFS-014). Larva, [Coleoptera]. Apr 2002. PR China: Baiyin County, Gansu Province.
- 7165 H Liu (MSUFS-015). Adult, *Plectrodera scalator* [Coleoptera: Cerambycidae] from laboratory colony. 16 Jul 2002. USA: East Lansing, Michigan.

- 7166 H Liu (MSUFS-016). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7167 H Liu (MSUFS-017). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7168 H Liu (MSUFS-018). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7169 H Liu (MSUFS-019). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7170 H Liu (MSUFS-020). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7171 H Liu (MSUFS-021). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7172 H Liu (MSUFS-022). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7173 H Liu (MSUFS-023). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7174 H Liu (MSUFS-024). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7175 H Liu (MSUFS-025). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7176 H Liu (MSUFS-026). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7177 H Liu (MSUFS-027). 1st instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7178 H Liu (MSUFS-028). Pupa, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 27 Jul 2002. PR China: Bazhou County, Hebei Province.
- 7179 H Liu (MSUFS-029). 3rd instar larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 30 Dec 2002. USA: New York, New York.
- 7202 [CEP 059] C López Lastra (1 C). Adult, [Coleoptera: Curculionidae]. May 2003. Argentina: Arturo Segui, La Plata, Buenos Aires.
- 7241 JM Sung (EFCC 1290). [Coleoptera: Carabidae]. 11 Jul 1997. Republic of Korea: Hanla Mt., Jeju Province.
- 7244 JM Sung (EFCC 1646). [Coleoptera: Chrysomelidae]. 20 Sep 1997. Republic of Korea: Gujeol Mt., Kangwon-do.
- 7247 JM Sung (EFCC 2010). [Coleoptera: Chrysomelidae]. 20 May 1998. Republic of Korea: Guryungryung, Kangwon-do.
- 7251 JM Sung (EFCC 2022). [Coleoptera: Cerambycidae]. 4 Jun 1998. Republic of Korea: Chiag Mt., Kangwon-do.
- 7261 JM Sung (EFCC 2941). [Coleoptera: Cerambycidae]. Jun 1999. Republic of Korea: Obong Mt., Kangwon-do.
- 7264 JM Sung (EFCC 3684). [Coleoptera: Scarabaeidae]. 10 Aug 1999. Republic of Korea: Chilsung Mt., Kangwon-do.
- 7266 JM Sung (EFCC 4381). [Coleoptera: Cerambycidae]. 29 Aug 1999. Republic of Korea: Yongmoon Mt., Gyeonggi Province.
- 7270 JM Sung (EFCC 6522). [Coleoptera: Carabidae]. 7 Jul 2001. Republic of Korea: Welchul Mt., Jheonnam.
- 7271 JM Sung (EFCC 6878). [Coleoptera: Chrysomelidae]. 11 Jul 2001. Republic of Korea: Hanla Mt., Jeju Province.
- 7272 JM Sung (EFCC 6879). [Coleoptera: Chrysomelidae]. 11 Jul 2001. Republic of Korea: Hanla Mt., Jeju Province.
- 7275 JM Sung (EFCC 8224). [Coleoptera: Cerambycidae]. 8 Sep 2001. Republic of Korea: Chungryang Mt., Gyeongbuk Province.
- 7404 DC Steinkraus. Larva, *Enaphalodes rufulus* [Coleoptera: Cerambycidae] from *Quercus rubra* L., northern red oak. 14 May 2003. USA: Ozark National Forest, Franklin County, Arkansas.
- 7466 [CEP 075] C López Lastra. [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 30 Dec 2003. Argentina: Berazategui, Buenos Aires.
- 7470 [CEP 083] C López Lastra. [Coleoptera] on *Eryngium* sp. (Apiaceae). 9 Mar 2004. Argentina: Horco Molle, Tucumán.
- 7471 [CEP 092] C López Lastra. [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 7 Apr 2004. Argentina: Colonia Urquiza, La Plata, Buenos Aires.
- 7525 S Keller (727). Adult, *Ips typographus* [Coleoptera: Scolytidae]. 6 Jul 2001. Switzerland: Rothenburg, Lucerne.
- 7526 S Keller (728). Adult, *Ips typographus* [Coleoptera: Scolytidae]. 6 Jul 2001. Switzerland: Rothenburg, Lucerne.
- 7581 [SRCAMB B-25] V Likhovidov ← BA Borisov. Larva, [Coleoptera: Carabidae] Isolated from synnema of *Cordyceps entomorrhiza*. Aug 2001. Russian Federation: Vladivostok District, Primorsky Krai. Field Collection Number F-206.
- 7758 [IMI 012944] *Hypothenemus hampei* [Coleoptera: Scolytidae]. 1926. Sri Lanka. **RESTRICTED ACCESS:** consult Curator.
- 7763 [IMI 358840] *Otiorrhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 10 Jun 2005. United Kingdom: England. **RESTRICTED ACCESS:** consult Curator.

- 7764 [IMI 386243] *Sitophilus* sp. [Coleoptera: Curculionidae]. Rec'd 10 Jun 2005. United Kingdom. **RESTRICTED ACCESS:** consult Curator.
- 7769 [IMI 389521] [Coleoptera: Curculionidae] grain weevil. Rec'd 10 Jun 2005. United Kingdom: sweepings at premises no. 01/070802. **RESTRICTED ACCESS:** consult Curator.
- 7773 [IMI 386368] *Sitophilus* sp. [Coleoptera: Curculionidae]. Rec'd 10 Jun 2005. United Kingdom. **RESTRICTED ACCESS:** consult Curator.
- 7774 [IMI 386367] *Sitophilus* sp. [Coleoptera: Curculionidae]. Rec'd 10 Jun 2005. United Kingdom. **RESTRICTED ACCESS:** consult Curator.
- 7795 [ATCC 74040] Fermone Corporation (FCI-7744). *Anthonomus grandis* [Coleoptera: Curculionidae]. Rec'd Jul 2005. USA: Rio Grande Valley, Texas. **RESTRICTED ACCESS:** consult Curator.
- 7813 [CSIRO FI-0001] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 16 Oct 1979. Australia: McKemey, Guyra, New South Wales.
- 7853 [CSIRO FI-0210] *Sericesthis nigrolineata* [Coleoptera: Scarabaeidae]. 22 May 1987. Australia: Canberra, Australian Capital Territory.
- 7941 JABB of the Carolinas Inc. (NC2). *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. 1988. USA: Turkey grow out houses, Union, West Virginia. **RESTRICTED ACCESS:** contact Curator.
- 7972 BC King (52). Adult, [Coleoptera] on forest floor. 28 Aug 2004. Canada: Pacific Spirit Regional Park, forest, Vancouver, British Columbia. GenBank match - AB027381 (100%) ITS. **RESTRICTED ACCESS:** consult Curator.
- 7978 BC King (77). [Coleoptera: Curculionidae] in loose duff near rocky beach. 19 Apr 2005. Canada: Pacific Spirit Regional Park, Wreck Beach, Vancouver, British Columbia. GenBank match - AB027381 (100%) LSU. **RESTRICTED ACCESS:** consult Curator.
- 8037 NV Meyling (KVL 04-32). *Rhynchites aequatus* [Coleoptera: Curculionidae] from *Crataegus* sp., hawthorn habitat type. 30 May 2003. Denmark: Bakkegården, Copenhagen, Tåstrup, Zealand. 55°40' N, 12°18' E.
- 8038 NV Meyling (KVL 04-33). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil of hedge. 6 Sep 2002. Denmark: Bakkegården, Copenhagen, Tåstrup, Zealand. 55°40' N, 12°18' E.
- 8065 [CSIRO FI-0570] *Pterohelaeus darlingensis* [Coleoptera: Tenebrionidae]. 5 Oct 1989. Australia: Jondaryan, Queensland.
- 8077 [CSIRO FI-0701] *Sitona* sp. [Coleoptera: Curculionidae]. 8 Oct 1990. New Zealand: South Island.
- 8078 [CSIRO FI-0703] *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 8 Oct 1990. New Zealand: South Island.
- 8079 [CSIRO FI-0705] *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 8 Oct 1990. New Zealand: Christchurch, South Island.
- 8260 RJ Pereault (bbpci#1). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.
- 8261 RJ Pereault (bbpci#2). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.
- 8262 RJ Pereault (bbpci#3). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.
- 8263 RJ Pereault (bbpci#5). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.
- 8372 [CEP 147; LPSC 896] AV Toledo. Adult, *Cycloneda sanguinea* [Coleoptera: Coccinellidae] on *Zea mays* L., maize. 11 Mar 2004. Argentina: El Manantial, Tucumán.
- 8373 [CEP 150; LPSC 897] AV Toledo. Adult, *Diabrotica speciosa* [Coleoptera: Chrysomelidae] on *Zea mays* L., maize. 11 Mar 2004. Argentina: El Manantial, Tucumán.
- 8412 AE Hajek (Q2k953). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 25 Jul 2001. USA: Quarantine colony, Ithaca, New York.
- 8413 AE Hajek (ST2). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 14 Jul 1998. USA: Quarantine colony, Syracuse, New York.
- 8414 AE Hajek (WU50). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 25 Jul 2000. PR China: Wuhe, Anhui.
- 8461 [CEP 138] AV Toledo. Adult, *Heilipodus erythropus* [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 18 Aug 2004. Argentina: La Plata, Buenos Aires.
- 8462 [CEP 148] AV Toledo. Adult, *Cycloneda sanguinea* [Coleoptera: Coccinellidae] on *Zea mays* L., maize. 11 Mar 2004. Argentina: El Manantial, Tucumán.
- 8463 [CEP 149] AV Toledo. Adult, *Cycloneda sanguinea* [Coleoptera: Coccinellidae] on *Zea mays* L., maize. 11 Mar 2004. Argentina: El Manantial, Tucumán.
- 8464 [CEP 175; LPSC 900] AV Toledo. Adult, *Cratomorphus diaphanus* [Coleoptera: Lampyridae] on *Eryngium* sp. (Apiaceae). Nov 2004. Argentina: Mercedes, Corrientes.
- 8494 [CSIRO FI-0018] [Coleoptera: Chrysomelidae: Hispinae]. 13 Feb 1980.
- 8520 [CEP 112] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 28 Apr 2004. Argentina: La Plata, Buenos Aires.
- 8521 [CEP 113] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 28 Apr 2004. Argentina: La Plata, Buenos Aires.

- 8522 [CEP 114] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 28 Apr 2004. Argentina: La Plata, Buenos Aires.
- 8523 [CEP 116] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 12 May 2004. Argentina: La Plata, Buenos Aires.
- 8524 [CEP 117] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 12 May 2004. Argentina: La Plata, Buenos Aires.
- 8525 [CEP 118] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 12 May 2004. Argentina: La Plata, Buenos Aires.
- 8526 [CEP 119] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 12 May 2004. Argentina: La Plata, Buenos Aires.
- 8530 [CEP 141] AV Toledo. Adult, [Coleoptera: Curculionidae] on *Eryngium* sp. (Apiaceae). 18 Aug 2004. Argentina: La Plata, Buenos Aires.
- 8668 Z Demirbag (KTU-57). *Rhynchites baccus* [Coleoptera: Curculionidae]. 7 Jul 2007. Turkey: Gümüşhane.
- 8705 RG Hollingsworth (H2). [Coleoptera: Curculionidae]. 14 Jul 2003. USA: Laboratory colony, U.S. Pacific Basin Agricultural Research Center, Hilo, Hawaii.
- 8756 [CSIRO FI-1153] *Phlyctinus callosus* [Coleoptera: Curculionidae]. 20 Nov 1995. Australia: Glasshouse, Knowfield, Victoria.
- 8757 [CSIRO FI-1154] *Phlyctinus callosus* [Coleoptera: Curculionidae]. 20 Nov 1995. Australia: Glasshouse, Knowfield, Victoria.
- 8763 [CSIRO FI-1162] *Anoplognathus* sp. [Coleoptera: Scarabaeidae]. May 1996. Australia: Cooma, New South Wales.
- 8771 LA Castrillo (APMI1) ← JJ Duan. *Agrilus planipennis* [Coleoptera: Buprestidae] on *Fraxinus pennsylvanica* Marshall, green ash. 25 Jun 2008. USA: Washington Park, Lansing, Michigan. **RESTRICTED ACCESS:** consult Curator.
- 8772 LA Castrillo (APMI2) ← JJ Duan. *Agrilus planipennis* [Coleoptera: Buprestidae] on *Fraxinus pennsylvanica* Marshall, green ash. 25 Jun 2008. USA: Washington Park, Lansing, Michigan. **RESTRICTED ACCESS:** consult Curator.
- 8773 LA Castrillo (APMI3) ← JJ Duan. *Agrilus planipennis* [Coleoptera: Buprestidae] on *Fraxinus pennsylvanica* Marshall, green ash. 8 Jul 2008. USA: Washington Park, Lansing, Michigan. **RESTRICTED ACCESS:** consult Curator.
- 8774 LA Castrillo (APMI4) ← JJ Duan. *Agrilus planipennis* [Coleoptera: Buprestidae]. 19 Jul 2008. USA: Okemos, Michigan. **RESTRICTED ACCESS:** consult Curator.
- 8835 [CSIRO FI-1261] [Coleoptera: Chrysomelidae]. 25 May 1998. Australia: Tasmania.
- 8836 [CSIRO FI-1262] [Coleoptera: Chrysomelidae]. 25 May 1998. Australia: Tasmania.
- 8853 [CSIRO FI-1348] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 86. Jun 1999. Australia: Condong, New South Wales.
- 8854 [CSIRO FI-1349] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 120. Jun 1999. Australia: Condong, New South Wales.
- 8998 M Pava-Ripoll (Bb UMD-Greenhouse). *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. 3 Dec 2008. USA: University of Maryland, greenhouse, College Park, Maryland.
- 9184 [CENICAFÉ Bb 9024] M Pava-Ripoll. *Dryocoetes confusus* [Coleoptera: Scolytidae]. Rec'd 1 Jul 2009. Canada.
- 9297 [ERL 1578] S Gouli (DV-05-1) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9298 [ERL 1602] V Gouli (DV-05-7) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9299 [ERL 1603] S Gouli (DV-05-11) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9300 [ERL 1604] V Gouli (DV-05-15) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9301 [ERL 1605] S Gouli (DV-05-17) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9302 [ERL 1606] V Gouli (DV-05-22) and A Zagoya. *Diabrotica virgifera virgifera* [Coleoptera: Chrysomelidae]. 2005. Mexico.
- 9441 [SRCAMB B-103] V Likhovidov ← BA Borisov. *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae]. Aug 2002. Russian Federation: Serpukhov District, Moscow Region. Field Collection Number F-211.
- 9442 [SRCAMB VL-277] V Likhovidov. [Coleoptera: Cerambycidae]. Jul 2001. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-235.
- 9444 [SRCAMB VL-1396/2] V Likhovidov. Adult, [Coleoptera]. 12 Aug 2003. Russian Federation: Caucasus Mountains, Sochi District, Krasnodarsky Krai. Field Collection Number F-348.
- 9449 [SRCAMB VL-1999] V Likhovidov. *Pyrrhalta viburni* [Coleoptera: Chrysomelidae]. 13 Sep 2005. Russian Federation: Moscow Region. Field Collection Number F-825.
- 10347 [ERL 155] BL Parker (SP-3) and W Reid. [Coleoptera]. 1998. Turkey.
- 10350 [ERL 327] BL Parker (SP-374) and M Skinner. [Coleoptera: Chrysomelidae]. 2000. Republic of Kazakhstan.
- 10471 MB Bondera. *Hypothenemus hampei* [Coleoptera: Scolytidae]. Dec 2010. USA: Kanalani Ohana Farm, Honaunau, Hawaii. 1600 ft elevation.

Beauveria bassiana(?) (Balsamo-Crivelli) Vuillemin
 [Sordariomycetes: Hypocreales]
 Cordycipitaceae

- 6890 H Cortez Madrigal (B1). [Coleoptera: Chrysomelidae] on *Eucalyptus* sp. 30 Sep 1999. Mexico: Huimanguillo, Tabasco.
- 6891 H Cortez Madrigal (B2). [Coleoptera: Chrysomelidae] on weeds. 10 Oct 2000. Mexico: Cárdenas, Tabasco.
- 9271 Z Demirbag and E Tanyeli (Dm-5). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.

Beauveria brongniartii (Saccardo) Petch
 [Sordariomycetes: Hypocreales]
 Cordycipitaceae. Major synonym: *Beauveria tenella* (Saccardo) MacLeod.

- 617 ATCC (26156) ← P Ferron (6). Larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. Rec'd 27 May 1981. France. Identification verified genomically. Ex-type Isolate proposed for conservation as new type of species.
- 979 [GCRI 64-82] RA Hall ← J Fargues. *Melolontha melolontha* [Coleoptera: Scarabaeidae]. Acc'd 17 Oct 1983. France. Identification verified genomically.
- 985 J Aoki (Beau. 22) ← K Katagiri ← T Kushida. *Anomala costata* [Coleoptera: Scarabaeidae]. Nov 1971. Japan: Hachioji, Tokyo Prefecture. Identification verified genomically.
- 1067 TJ Poprawski ← S Keller (117). Adult, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 10 May 1982. Switzerland: Buhwil, Thurgau.
- 1068 TJ Poprawski ← S Keller (118). Adult, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 10 May 1982. Switzerland: Buhwil, Thurgau.
- 1069 TJ Poprawski ← S Keller (119). *Melolontha melolontha* [Coleoptera: Scarabaeidae]. Acc'd Feb 1984. Switzerland. Mixture of 3 strains.
- 1070 TJ Poprawski ← S Keller (120). Adult, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. Jul 1982. Switzerland: Breitenloo, Thurgau.
- 1071 TJ Poprawski ← S Keller (125). 2nd instar larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 6 Jan 1983. Switzerland: Bleiken, Thurgau.
- 1072 TJ Poprawski ← S Keller (126). 2nd instar larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 6 Jan 1983. Switzerland: Bleiken, Thurgau.
- 1076 S Keller (131). 2nd instar larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 6 Jan 1983. Switzerland: Istighofen, Thurgau.
- 1077 S Keller (134). 2nd instar larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 8 Dec 1983. Switzerland: Bleiken, Thurgau.
- 1431 MC Rombach (A). *Niphonoclea* sp. [Coleoptera: Cerambycidae] on forest litter. Apr 1984. Philippines: UPLB Botanical Garden, Los Baños, Manila.

- 2271 BT Forschler (RF-3). Adult, *Cyrtepistomus castaneus* [Coleoptera: Curculionidae]. Sep 1986. USA: Robinson Forest, Univ. of Kentucky, Breathitt County, Kentucky. Identification verified genomically.
- 2660 C Gopalakrishnan (31). Adult, [Coleoptera]. Rec'd Nov 1988. India.
- 3054 [MAF F1] T Glare. *Costelytra zealandica* [Coleoptera: Scarabaeidae]. Rec'd Oct 1990. New Zealand: South Island.
- 4024 T Steenberg (226) ← A Kirkeby-Thomse. *Ips typographus* [Coleoptera: Scolytidae] on Sitka spruce. Rec'd Nov 1993. Denmark.
- 4380 LA Lacey (94141) ← CAAS (CZN.9301). [Coleoptera: Scarabaeidae]. 7 May 1994. Location not specified.
- 4381 LA Lacey (94142) ← CAAS (4pl). [Coleoptera: Scarabaeidae]. 7 May 1994. Location not specified.
- 4385 LA Lacey (94136). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 5 May 1994. China: Cangzhou.
- 4386 LA Lacey (94137). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 5 May 1994. China: Cangzhou.
- 4388 LA Lacey (94139). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 5 May 1994. China: Cangzhou.
- 4389 LA Lacey (94131). *Popillia japonica* [Coleoptera: Scarabaeidae]. 27 Apr 1994. Japan: Sapporo, Hokkaido.
- 4458 LA Lacey (94127). *Popillia japonica* [Coleoptera: Scarabaeidae]. 27 Apr 1994. Japan: Sapporo Golf Course, Sapporo, Hokkaido.
- 4465 LA Lacey (94143). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4466 LA Lacey (94144). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4467 LA Lacey (94145). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4468 LA Lacey (94146). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4469 LA Lacey (94147). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4470 LA Lacey (94148). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4471 LA Lacey (94149). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4472 LA Lacey (94150). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4473 LA Lacey (94151). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4475 LA Lacey (94153). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4476 LA Lacey (94154). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4477 LA Lacey (94155). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.
- 4478 LA Lacey (94156). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 4 May 1994. China: Cangzhou.

- 4992 LA Lacey (95050). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. 7 Sep 1995. Azores: Teceira.
- 4993 LA Lacey (95052). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. 7 Sep 1995. Azores: Teceira.
- 4994 LA Lacey (95053). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. 7 Sep 1995. Azores: Teceira.
- 4995 LA Lacey (95054). Adult, *Popillia japonica* [Coleoptera: Scarabaeidae]. 7 Sep 1995. Azores: Teceira.
- 5355 LA Lacey (96015). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5356 LA Lacey (96016). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5357 LA Lacey (96017). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5358 LA Lacey (96018). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5359 LA Lacey (96019). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5360 LA Lacey (96020). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5361 LA Lacey (96021). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5362 LA Lacey (96022). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5363 LA Lacey (96023). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 5364 LA Lacey (96024). *Melolontha* sp. [Coleoptera: Scarabaeidae]. 30 May 1996. Germany: Lampertheim, Hesse.
- 6213 AE Hajek (1). Adult, [Coleoptera: Curculionidae] in leaf litter. Jun 1998. USA: Yellow Barn State Forest, Dryden, New York. Identification verified genomically.
- 6214 AE Hajek (2A). Adult, [Coleoptera: Curculionidae]. Jun 1998. USA: Yellow Barn State Forest, Dryden, New York. Identification verified genomically.
- 6215 AE Hajek (3A). Adult, [Coleoptera: Curculionidae]. Jun 1998. USA: Yellow Barn State Forest, Dryden, New York. Identification verified genomically.
- 6235 [RCEF 0385] *Anoplophora malasiaca* [Coleoptera: Cerambycidae]. Rec'd 24 Aug 1999. Japan.
- 6412 M Shimazu (F-1101). *Anoplophora malasiaca* [Coleoptera: Cerambycidae]. 8 Dec 1993. Japan: Kukisaki, Ibaraki Prefecture.

- 7268 JM Sung (EFCC 5119). [Coleoptera: Carabidae]. 14 Jul 2000. Republic of Korea: Undooryung, Kangwon-do. Identification verified genomically.
- 7528 S Keller (812). 3rd instar larva, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 23 Oct 2002. Switzerland: Innertkirchen, Bern.
- 7761 [CBS 326.67; IMI 232818] *Costelytra zealandica* [Coleoptera: Scarabaeidae]. Rec'd 10 Jun 2005. Netherlands.
- 9452 [SRCAMB VL-1582] V Likhovidov. Larva, [Coleoptera: Elateridae]. 14 Sep 2004. Russian Federation: Caucasus Mountains, Karachayevo-Cherkessiya Republ. Field Collection Number F-508.

Beauveria caledonica Bissett & Widden
[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 1567 S Keller (D156). [Coleoptera: Scolytidae]. 14 Aug 1984. Switzerland: Siblingen, Schaffhausen. Identification verified genomically.
- 2251 IMI ← HC Evans (Ro 596). Adult, [Coleoptera]. Feb 1980. Brazil: Belém, Pará. Identification verified genomically.
- 8024 NV Meyling (KVL 03-70). *Amphimallon solstitialis* [Coleoptera: Scarabaeidae] from soil. 12 Jul 2000. Denmark: Jægerspris, Zealand. Identification verified genomically.

Beauveria malawiensis SA Rehner & Aquino de Muro
[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 7760 [IMI 228343] *Phoracantha semipunctata* [Coleoptera: Cerambycidae]. 4 May 1978. Malawi: Zomba, Southern. CULTURE EX TYPE.

Beauveria pseudobassiana (sp. nov.,unpubl.)
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Defined primarily by genotypic characters

- 1855 P Spencer and HS Whitney (R640). Adult, *Ips* sp. [Coleoptera: Scolytidae]. Jul 1984. Canada: Christina Lake, British Columbia. Identification verified genomically.
- 4933 LA Lacey (95035). *Tomicus minor* [Coleoptera: Scolytidae] *Pinus nigra*. 4 Apr 1995. France: Saint-Etienne, de Gourgas. Identification verified genomically.
- 6229 [RCEF 0231] Adult, [Coleoptera: Scolytidae (Tribe Ipini)]. 8 Aug 1996. PR China: Guizhou Province. Identification verified genomically.

Beauveria sungii SA Rehner & Humber
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Defined primarily by genotypic characters

- 1685 M Shimazu (F-450). *Lachnostenra morosa* [Coleoptera: Scarabaeidae]. Acc'd 2 Nov 1984. Japan:

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- Ibaraki Prefecture. EX-TYPE ISOLATE for species defined genetically.
- 5689 JM Sung (KEFC-251). [Coleoptera: Scarabaeidae]. 20 Aug 1993. Republic of Korea: Gal-Cheon, Kangwon-do. From teleomorph morphologically resembling *Cordyceps scarabaeicola*. Identification of anamorph verified genetically.
- 7279 JM Sung (EFCC 5014). [Coleoptera: Chrysomelidae]. 11 Jul 2000. Republic of Korea: Guryungryung, Kangwon-do. From teleomorph morphologically resembling *Cordyceps scarabaeicola*. Identification of anamorph verified genetically.
- 7280 JM Sung (EFCC 5657). [Coleoptera: Chrysomelidae]. Aug 2000. Republic of Korea: Guryungryung, Kangwon-do. From teleomorph morphologically resembling *Cordyceps scarabaeicola*. Identification of anamorph verified genetically.

Beauveria varroae SA Rehner & Humber

[Sordariomycetes: Hypocreales]

Cordycitaceae. Defined primarily by genotypic characters

- 2694 [IMI 328059] C Prior. *Larinus* sp. [Coleoptera: Curculionidae]. Rec'd 19 Mar 1989. Switzerland. Identification verified genetically.

Candida sp.

[Saccharomycetes: Saccharomycetales]

All of these strains grow as yeasts with facultative capacities to attack cockroaches. It remains uncertain whether they can be primary pathogens or depend upon the host to be stressed, wounded, or otherwise compromised.

- 5729 TJ Poprawski. *Hypothenemus hampei* [Coleoptera: Scolytidae] from laboratory colony. Rec'd 20 May 1998. USA: Weslaco, Texas.

Cladosporium sphaerospermum Penzig

[Dothideomycetes: Capnodiales]

Mycosphaerellaceae

- 6516 RT Mayer. Larva, *Diaprepes abbreviata* [Coleoptera: Curculionidae]. Rec'd 10 May 2000. USA: Florida.

Clonostachys rosea (Link : Fries) Schroers, Samuels,

Seifert & W Gams

[Sordariomycetes: Hypocreales]

Bionectriaceae

- 9491 [SRCAMB B-46] V Likhovidov ← BA Borisov. Larva, [Coleoptera: Scarabaeidae]. Jul 2001. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-279.

Conidiobolus sp.

[Entomophthoromycotina: Entomophthorales]

Ancylistaceae. These strains include a heterogeneous assortment of fungi isolated as saprobes and as zoopathogens. Some may represent undescribed new species. Identifications of *Conidiobolus* species are made difficult by the relative lack of taxonomic characters and of any modern taxonomic attention.

Caution: Strains derived from mammalian mycoses should be treated as potentially hazardous; observe handling precautions noted for *Conidiobolus coronatus*.

- 80 RG Kenneth (3081) or (C.o. 15) ← A Uziel. Larva, *Hypera variabilis* [Coleoptera: Curculionidae]. Mar 1976. Israel: alfalfa field, Sedé Eliyahu.
- 81 RG Kenneth (3082) or (C.o. 10) ← A Uziel. Larva, *Hypera variabilis* [Coleoptera: Curculionidae]. Mar 1976. Israel: Sedé Eliyahu.

Conidiobolus coronatus (Costantin) Batko

[Entomophthoromycotina: Entomophthorales]

Ancylistaceae. Major synonyms: *Entomophthora coronata* (Costantin) Kevorkian, *Conidiobolus villosus* Martin.

Caution: This species is known to cause human mycoses that are primarily tropical in occurrence and confined to the nasal passages and adjacent superficial areas. Avoid inhalation of conidia and do not handle cultures without gloves if unhealed cuts or abrasions are present. This species has low pathogenicity for mammals and should be relatively safe if handled with good microbiological technique.

- 1572 S Keller (490). *Ceutorhynchus napi* [Coleoptera: Curculionidae]. 14 Jun 1984. Switzerland.
- 1573 S Keller (491). *Ceutorhynchus napi* [Coleoptera: Curculionidae]. 14 Jun 1984. Switzerland.
- 1574 S Keller (493). *Ceutorhynchus napi* [Coleoptera: Curculionidae]. 14 Jun 1984. Switzerland.
- 1575 S Keller (494). *Ceutorhynchus napi* [Coleoptera: Curculionidae]. 14 Jun 1984. Switzerland.

Conidiobolus osmodes Drechsler

[Entomophthoromycotina: Entomophthorales]

Ancylistaceae

- 79 [FPMI 695] RG Kenneth (3080) or (3) ← A Uziel. Larva, *Hypera variabilis* [Coleoptera: Curculionidae]. Mar 1976. Israel: Sedé Eliyahu.

Cordyceps sp.

[Sordariomycetes: Hypocreales]

Family cannot be determined since this genus in its old, broad sense is now segregated among several genera in three families

- 3718 RA LeBrun ← J Hanula (C-4). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. Summer 1991. Location not specified.

Cordyceps sp.
Evlachovaea kintrischica

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- 4852 JM Sung (C-331). Adult, *Sitophilus oryzae* [Coleoptera: Curculionidae]. Jul 1994. Republic of Korea: KNU experiment Forest, Kangwon National University.
- 7848 [SRCAMB B-47] V Likhovidov ← BA Borisov. Larva, [Coleoptera: Scarabaeidae] Isolated from stroma. Aug 2002. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-200.

Cordyceps brongniartii Shimazu

[Sordariomycetes: Hypocreales]

Cordycipitaceae

- 7516 M Shimazu (F-621). Larva, *Anomala cuprea* [Coleoptera: Scarabaeidae]. 27 Jul 1987. Japan: Nishidake, Nagano Prefecture. Isolated from a peritheciun. Anamorph is Beauveria brongniartii. Identification verified genomically.
- 7517 M Shimazu (F-638). Larva, *Anomala cuprea* [Coleoptera: Scarabaeidae]. 16 Apr 1988. Laboratory manipulation. Isolated from an ascospore. Anamorph is Beauveria brongniartii. Identification verified genomically.

Cordyceps scarabaeicola Kobayasi

[Sordariomycetes: Hypocreales]

Cordycipitaceae. Anamorph: *Beauveria*

- 7277 JM Sung (EFCC 2533). [Coleoptera: Chrysomelidae]. 6 Aug 1998. Nepal.
- 7278 JM Sung (EFCC 2535). [Coleoptera: Chrysomelidae]. 6 Aug 1998. Nepal.

Engyodontium rectidentatum (Matsush.) W. Gams, de Hoog, Samson & H.C. Evans
[Sordariomycetes: Hypocreales]

Cordycipitaceae

- 7805 [SRCAMB B-158] V Likhovidov ← BA Borisov. [Coleoptera: Scarabaeidae] Isolated from unripened stroma. 9 Aug 2002. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-269.

Erynia sp.

[Zygomycetes: Entomophthoromycotin]

Entomophthoraceae. Strains included here were not sufficiently identifiable to the species and have not been reidentified since publication of the entomophthoralean taxonomy used here (see Humber, 1989, Mycotaxon 34:441-460). In this classification these strains would be reassigned to *Pandora* Humber, *Furia* (Batko) Humber, *Erynia* (Nowakowski ex Batko) Remaudière & Hennebert, or *Zoophthora* Batko.

- 2525 J Eilenberg (KVL 34). *Rhagonycha fulva* [Coleoptera: Cantharidae]. Aug 1987. Denmark: Holmegaards Mose, Zealand.
- 2536 J Eilenberg (KVL 18). *Rhagonycha fulva* [Coleoptera: Cantharidae]. 31 Jul 1986. Denmark: Holmegaards Mose, Zealand.

- 2537 J Eilenberg (KVL 23). *Rhagonycha fulva* [Coleoptera: Cantharidae]. 31 Jul 1986. Denmark: Holmegaards Mose, Zealand.
- 2538 J Eilenberg (KVL 20). *Rhagonycha fulva* [Coleoptera: Cantharidae]. 31 Jul 1986. Denmark: Holmegaards Mose, Zealand.
- 2539 J Eilenberg (KVL 22). *Rhagonycha fulva* [Coleoptera: Cantharidae]. 31 Jul 1986. Denmark: Holmegaards Mose, Zealand.
- 2553 [ARSEF 2662 (deaccessioned)] J Eilenberg (KVL 19) and J Martin. *Rhagonycha fulva* [Coleoptera: Cantharidae]. 31 Jul 1986. Denmark: Holmegaards Mose, Zealand.
- 2663 J Eilenberg (KVL 33) ← J Martin. *Rhagonycha fulva* [Coleoptera: Cantharidae]. Aug 1987. Denmark: Holmegaards Mose, Zealand.
- 2664 J Eilenberg (KVL 40). [Coleoptera: Cantharidae]. Jun 1987. Denmark: Brogaard, Lammfjorden.
- 5352 KT Hodge. Adult, [Coleoptera: Cantharidae] Willow. 18 Jun 1996. USA: German Cross Road, Dryden, New York.

Evlachovaea sp.

[Sordariomycetes: Hypocreales]

Cordycipitaceae

- 1017 HS Whitney (R599). Adult, *Dendroctonus rufipennis* [Coleoptera: Scolytidae]. Jun 1975. Canada: nr. Hixon, British Columbia.
- 7403 G Zimmermann (E 1622/01) ← U Heimbach. Larva, *Agriotes* sp. [Coleoptera: Elateridae]. Oct 2001. Germany: Neustadt an der Weinstrasse, Rheinhessen-Pfalz.
- 7551 [CIAT 301] A Gaigl. *Phyllophaga menetriesi* [Coleoptera: Scarabaeidae]. 14 Jan 2004. Colombia: Caldono, Cauca. 1500 m elevation.

Evlachovaea kintrischica Borisov & Tarasov

[Sordariomycetes: Hypocreales]

Cordycipitaceae

- 7218 [CMPPB 150; SRCAMB B-184] V Likhovidov ← BA Borisov (B.B. 2). *Agelastica alni* [Coleoptera: Chrysomelidae] in litter. 21 Sep 1991. Republic of Georgia: Kintrishi Valley, near Cordon Tskhemlovani, Kintrishkiy Nature Reserve, Autonomous Republic of Adjara. 360 m elevation. Field Collection Number F-306. CULTURE EX TYPE.
- 8058 [CMPPB 150; SRCAMB B-184] V Likhovidov ← BA Borisov (B.B. 2). *Agelastica alni* [Coleoptera: Chrysomelidae] in litter. 21 Sep 1991. Republic of Georgia: Kintrishi Valley, near Cordon Tskhemlovani, Kintrishkiy Nature Reserve, Autonomous Republic of Adjara. 360 m elevation. Field Collection Number F-306. CULTURE EX TYPE.

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Fusarium sp.

[Sordariomycetes: Hypocreales]
Nectriaceae

- 1310 [NRRL 25082] TJ Poprawski (A9). Adult, *Sitona discoideus* [Coleoptera: Curculionidae]. 8 Feb 1984. Morocco: Achouria.
- 2568 [NRRL 25091] F Agudelo-Silva ← RL Bugg. Larva, *Chalcodermus aeneus* [Coleoptera: Curculionidae]. Nov 1987. USA: Tifton, Georgia.
- 2569 [NRRL 25092] F Agudelo-Silva ← RL Bugg. Larva, *Chalcodermus aeneus* [Coleoptera: Curculionidae]. Nov 1987. USA: Tifton, Georgia.
- 3030 [NRRL 25097] W Mechaber (weevil#1318). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Lyonia mariana*. 1 Jun 1990. USA: Pemberton, New Jersey.
- 3031 [NRRL 25098] W Mechaber (weevil#1334). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Lyonia mariana*. 1 Jun 1990. USA: Pemberton, New Jersey.
- 3032 [NRRL 25099] W Mechaber (weevil#1354). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Lyonia mariana*. 1 Jun 1990. USA: Pemberton, New Jersey.
- 4011 [NRRL 25123] T Steenberg (193) ← J Martin. *Lilioceris lili* [Coleoptera: Chrysomelidae]. Jun 1989. Denmark: Garden of Agricultural University, Zealand.
- 4825 [NRRL 52764] JD Vandenberg (27-2). Adult, *Otiorrhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 5461 TJ Poprawski (TJP926) ← G Mercadier (EBCL 97031). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 14 Jan 1997. Ivory Coast: RCI.7, Bozi. 89099.
- 5875 FE Vega (EBCL 98004). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
- 5878 FE Vega (EBCL 98011). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
- 5879 FE Vega (EBCL 98012). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. 19 Oct 1997. Uganda: Chesogok.
- 6602 [NRRL 52701] FE Vega. *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 28 Sep 2000. Colombia: Caldas.
- 7063 RA Humber (2A). *Hypothenemus hampei* [Coleoptera: Scolytidae]. 13 Jul 2001. Indonesia: Konaweha, Sulawesi.
- 8131 [NRRL 52740] LS Bauer and H Liu (MF-221). Pre-pupa, *Agrilus planipennis* [Coleoptera: Buprestidae]. 1 Dec 2005. USA: Ann Arbor, Michigan.

Fusarium sp.

Isaria amoenerosea

- 8266 [NRRL 52741] RJ Pereault (Walton Spray pci#3). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.

- 8267 [NRRL 52743] RJ Pereault (Walton Control pci#1). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.

- 9273 Z Demirbag and E Tanyeli (Dm-7). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.

- 9274 Z Demirbag and E Tanyeli (Dm-8). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.

Harposporium janus Shimazu & Glockling

[Sordariomycetes: Hypocreales]
Ophiocordycipitaceae

- 5601 SL Glockling. Larva, [Coleoptera: Cerambycidae] on tree trunk. Rec'd 2 Dec 1997. Japan.

Hirsutella fusiformis Speare

[Sordariomycetes: Hypocreales]
Ophiocordycipitaceae

- 5474 [ATCC 32804; CBS 205.33] *Brachyderes incanus* [Coleoptera: Curculionidae]. Rec'd 13 May 1997. Netherlands.

Isaria sp.

[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 9519 [SRCAMB VL-1914/1] V Likhovidov. Larva, [Coleoptera]. 22 Aug 2005. Belarus: Belavezhskaya Puscha National Park. Field Collection Number F-853.

Isaria amoenerosea P. Hennings

[Sordariomycetes: Hypocreales]
Cordycipitaceae. Major synonym: *Paecilomyces amoeneroseus* (Hennings) Samson. Reclassified during a phylogenetically necessary reclassification of *Paecilomyces* Section *Isarioidea*.

- 741 [CNPAF 82-1-15-06; CP 19] RA Daoust. *Lagria vilosa* [Coleoptera: Lagriidae]. Jan 1982. Brazil: CNPAF, Goiânia, Goiás.

- 744 [CNPAF 82-2-15-05; CP 26] RA Daoust. *Lagria vilosa* [Coleoptera: Lagriidae]. Feb 1982. Brazil: CNPAF, Goiânia, Goiás.

- 2220 [CNPAF 86-06-05-4; CP 216] DW Roberts ← GS da Silva. *Lagria vilosa* [Coleoptera: Lagriidae]. 5 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.

- 2958 CENARGEN (CG 162). *Lagria vilosa* [Coleoptera: Lagriidae]. Rec'd 14 Mar 1990. Brazil: Formosa, Goiás.

- 2959 CENARGEN (CG 163). *Lagria vilosa* [Coleoptera: Lagriidae]. Rec'd 14 Mar 1990. Brazil: Formosa, Goiás.

- 2960 CENARGEN (CG 164). *Lagria vilosa* [Coleoptera: Lagriidae]. Rec'd 14 Mar 1990. Brazil: Formosa, Goiás.

*Isaria amoenerosea**Isaria farinosa*

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4097 LA Lacey (94007). *Lagria vilosa* [Coleoptera: Lagriidae]. Rec'd 28 Mar 1994. Brazil.

4849 JM Sung (C-321). Adult, [Coleoptera: Meloidae]. 14 Jul 1994. Republic of Korea: Chiag Mt., Kangwon-do.

Isaria cateniamannulata (ZQ Liang) Samson & Hywel-Jones
[Sordariomycetes: Hypocreales]
Cordycipitaceae

6241 [RCEF 0464] [Coleoptera: Curculionidae]. 8 Jul 1998. PR China: Anhui.

6243 [RCEF 0516] *Brachyderes incanus* [Coleoptera: Curculionidae]. 27 Jan 1999. PR China: Anhui.

Isaria catenobiliqua (ZQ Liang) Samson & Hywel-Jones
[Sordariomycetes: Hypocreales]
Cordycipitaceae

6244 [RCEF 0189] Adult, [Coleoptera]. Rec'd 24 Aug 1999. PR China: Anhui.

Isaria coleopterorum (Samson & HC Evans) Samson & Hywel-Jones
[Sordariomycetes: Hypocreales]
Cordycipitaceae

9509 [SRCAMB VL-2091] V Likhovidov. [Coleoptera: Lampyridae]. 25 Aug 2006. Russian Federation: Moscow Region. Field Collection Number F-1086.

Isaria farinosa (Holmsk.) Fries
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Major synonym: *Paecilomyces farinosus* (Holmsk. ex Gray) Brown & Smith. Reclassified during a phylogenetically necessary reclassification of *Paecilomyces* Section *Isarioidea*. Teleomorph: *Cordyceps memorabilis* Ces.

799 DA Rodriguez Sierra ← A López. Pupa, *Premnotrypes vorax* [Coleoptera: Curculionidae]. Nov 1981. Colombia: Tibaitata, Mosquera, Nariño.

1507 I Majchrowicz (61) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.

1508 I Majchrowicz (76) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.

1957 [CNPAF 85-7-22-1; CP 182] JC Lord and BP Magalhães. *Lagria vilosa* [Coleoptera: Lagriidae]. 22 Jul 1985. Brazil: União dos Palmares, Alagoas.

2355 [ARSEF 2379 (never frozen)] MC Rombach (201286-7). [Coleoptera]. 20 Dec 1986. Philippines: rainforest, Mt. Makiling, Los Baños, Manila.

2937 EcoScience Corporation (32-51) ← LJ Dapsis. *Otiorynchus sulcatus* [Coleoptera: Curculionidae]. Aug 1989. USA: Oregon.

4029 T Steenberg (234) ← CW Riedel. *Agonum dorsale* [Coleoptera: Carabidae]. Jan 1991. Denmark: Menstrup, Zealand.

4039 T Steenberg (259). *Sitona lineatus* [Coleoptera: Curculionidae]. Oct 1991. Denmark: Copenhagen, Tåstrup, Zealand.

4040 T Steenberg (260) ← L Øgaard. *Staphylinus olens* [Coleoptera: Staphylinidae]. Oct 1991. Denmark: Bagsværd, Zealand.

4043 T Steenberg (269) ← CW Riedel. *Bembidion lampros* [Coleoptera: Carabidae]. Jan 1991. Denmark.

4044 T Steenberg (270). *Agonum dorsale* [Coleoptera: Carabidae]. Jan 1991. Denmark.

4045 T Steenberg (274) ← V Langer. Larva, *Hapalus* sp. [Coleoptera: Carabidae]. Nov 1991. Denmark: Copenhagen, Tåstrup, Zealand.

5073 LA Lacey (95065). [Coleoptera: Cerambycidae]. 6 Oct 1995. France: Lodéve, Hérault.

5074 LA Lacey (95066). [Coleoptera: Cerambycidae]. 6 Oct 1995. France: Lodéve, Hérault.

5075 LA Lacey (95067). [Coleoptera: Cerambycidae]. 6 Oct 1995. France: Lodéve, Hérault.

5080 LA Lacey (95069). [Coleoptera: Cerambycidae]. 16 Nov 1995. France: Saint-Etienne, de Gourgas.

5699 JM Sung (KEFC-1170). [Coleoptera: Tenebrionidae]. 9 Jul 1997. Republic of Korea: Yongmoon Mt., Gyeonggi Province.

5754 BL Parker (SPT 012). [Coleoptera: Coccinellidae]. 18 Jan 1998. Turkey: Hirshito Ht., Gaziantep, Gaziantep.

5834 BL Parker (SPT 013/2). [Coleoptera: Coccinellidae]. 18 Jan 1998. Turkey: Hursit Mt., Gaziantep, Gaziantep.

5858 T Steenberg (SSL 610). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Feb 1997. Denmark: Broiler house, Øster Sottrup, Jutland.

6488 BL Parker (SPT-KZ-418). Adult, [Coleoptera: Scarabaeidae] overwintering in soil. 6 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.530' E 076°36.526'. **RESTRICTED ACCESS:**
contact Curator

6489 BL Parker (SPT-KZ-419). Adult, [Coleoptera: Scarabaeidae] overwintering in soil. 6 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.530' E 076°36.526'. **RESTRICTED ACCESS:**
contact Curator

6491 BL Parker (SPT-KZ-423). Adult, [Coleoptera: Chrysomelidae] overwintering in soil. 4 Feb 2000. Kazakhstan: GPS Coordinates N 43°23.081' E 077°34.126'. **RESTRICTED ACCESS:**
contact Curator

7276 JM Sung (EFCC 9251). [Coleoptera: Cerambycidae]. 23 Aug 2002. Republic of Korea: Seolag Mt., Kangwon-do.

Fungal Cultures

Isaria farinosa *Isaria fumosorosea*

- 8411 AE Hajek (02 NY 5-6-1). Adult, cadaver, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 10 Sep 2002. USA: Quarantine colony, Ithaca, New York.
- 8917 [ERL 253] BL Parker (AVRDC 0482B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9269 Z Demirbag and E Tanyeli (Dm-3). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.
- 9270 Z Demirbag and E Tanyeli (Dm-4). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.
- 9275 Z Demirbag and E Tanyeli (Dm-9). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.
- 9276 Z Demirbag and E Tanyeli (Dm-10). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.
- 9277 Z Demirbag and E Tanyeli (Dm-11). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.
- 9278 Z Demirbag and E Tanyeli (Dm-12). *Dendroctonus micans* [Coleoptera: Scolytidae]. 20 Jun 2009. Turkey: Maçka-Zigana, Trabzon.
- 9511 [SRCAMB VL-1587/3] V Likhovidov. [Coleoptera: Silphidae]. 14 Sep 2004. Russian Federation: Caucasus region, Karachayevо-Cherkessiya Republ. Field Collection Number F-525.
- 9516 [SRCAMB B-405/2] V Likhovidov ← BA Borisov. [Coleoptera]. Oct 2003. Ukraine: Kherson Oblast. Field Collection Number F-930.
- 9944 LS Bauer (Legg Park 1). Larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Rec'd 14 Apr 2010. USA: Legg Park, Okemos, Michigan.
- 9945 LS Bauer (Legg Park 2). Larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. Rec'd 14 Apr 2010. USA: Legg Park, Okemos, Michigan.

Isaria fumosorosea Wize

[Sordariomycetes: Hypocreales]

Cordycipitaceae. Major synonym: *Paecilomyces fumosoroseus* (Wize) Brown & Smith. Reclassified during a phylogenetically necessary reclassification of *Paecilomyces* Section *Isarioidea*.

- 722 [CNPAF 82-1-15-05; CP 18] RA Daoust. *Lagria vilosa* [Coleoptera: Lagriidae]. Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 1506 I Majchrowicz (71) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.
- 2216 [CNPAF 86-06-05-1; CP 212] DW Roberts ← PMOJ Neves. *Lagria vilosa* [Coleoptera: Lagriidae]. 5 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.

- 2217 [CNPAF 86-06-02-2; CP 213] DW Roberts ← OS Ohashi. *Lagria vilosa* [Coleoptera: Lagriidae]. 2 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.
- 2219 [CNPAF 86-06-05-3; CP 215] DW Roberts ← DMF Capalbo. *Lagria vilosa* [Coleoptera: Lagriidae]. 5 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.
- 2221 [CNPAF 86-06-05-1; CP 217] DW Roberts ← OS Ohashi. *Lagria vilosa* [Coleoptera: Lagriidae]. 5 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.
- 2679 AS Martins. 3rd instar larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 13 Oct 1988. Portugal: Terceira Island, Azores.
- 2956 CENARGEN (CG 123). *Spaethiella* sp. [Coleoptera: Chrysomelidae]. Rec'd 14 Mar 1990. Brazil: Manaus, Amazonas.
- 5627 I Vänninen (SF86-82). Larva, *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. Aug 1986. Finland: Kymenlaakso.
- 5694 JM Sung (KEFC-919). [Coleoptera]. 28 Jun 1996. Republic of Korea: Book-Bang, Hong-Cheon Kun, Kangwon-do.
- 5844 T Steenberg (SSL 58). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from soil.
- 5845 T Steenberg (SSL 59). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from soil.
- 5846 T Steenberg (SSL 61). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from soil.
- 5847 T Steenberg (SSL 62). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from soil.
- 6730 FE Vega (EBCL 97054). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 23 Feb 2001. Ivory Coast.
- 7284 FE Vega (MPM-5). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Rec'd 8 Jan 2004. Mexico: Tapachula, Chiapas.
- 7716 [SRCAMB B-173] V Likhovidov ← BA Borisov. [Coleoptera]. Aug 2002. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-189.
- 8142 LS Bauer and H Liu (MF-233). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 28 Jul 2006. USA: Brighton, Michigan.
- 8840 [CSIRO FI-1275] [Coleoptera: Chrysomelidae]. 5 Aug 1998. Australia: Tasmania.
- 8892 [CSIRO FI-1296] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from insect A11. 22 Dec 1998. Australia: Condong, New South Wales.
- 9521 [SRCAMB VL-2057] V Likhovidov. *Coccinella septempunctata* [Coleoptera: Coccinellidae]. Aug 2000. Ukraine: Kherson Oblast. Field Collection Number F-749.

9602 X Zou (9). [Coleoptera]. Rec'd 19 Jan 2010. PR China: Guizhou Province.

Isaria javanica (Friederichs & Bally) Samson & Hywel-Jones
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Major synonym: *Paecilomyces javanicus* (Friederichs & Bally) Brown & Smith. Reclassified during a phylogenetically necessary reclassification of *Paecilomyces* Section *Isarioidea*.

322 GR Buckingham. *Litodactylus leucogaster* [Coleoptera: Curculionidae]. Dec 1978. USA: Gainesville, Florida.

7119 HE Cabanillas. Adult, [Coleoptera] on wild olive tree. 29 Oct 2002. USA: Weslaco, Texas.

Lecanicillium sp.
[Sordariomycetes: Hypocreales]
Cordycipitaceae

9459 [SRCAMB VL-1587/2] V Likhovidov. [Coleoptera: Silphidae]. 14 Sep 2004. Russian Federation: Caucasus region, Karachayevо-Cherkessiya Republ. Field Collection Number F-524.

Lecanicillium fungicola (Preuss) Zare & W Gams
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Synonym: *Lecanicillium fungicola* (Preuss) Hassebrauk

9483 [SRCAMB VL-2063] V Likhovidov. Larva, [Coleoptera: Elateridae] Isolated from *Cordyceps* sp. Aug 2005. Belarus: Belavezhskaya Puscha National Park. Field Collection Number F-928.

Lecanicillium lecanii (Zimmermann) Zare & W Gams
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Segregate species in *Lecanicillium lecanii* species complex; formerly classified as *Verticillium lecanii* (Zimmermann) Viégas. Teleomorph: *Cordyceps confragosa* (Mains) GH Sung, JM Sung, Hywel-Jones & Spatafora [basionym: *Torrubiella confragosa* Mains]

1505 I Majchrowicz (70) ← F Herard. Imago, *Pyrrhalta luteola* [Coleoptera: Chrysomelidae]. May 1983. France: Entraigues, Vaucluse.

7181 H Liu (MSUFS-701). Adult, *Plectrodera scalaris* [Coleoptera: Cerambycidae] from laboratory colony. 18 Dec 2001. USA: East Lansing, Michigan.

7182 H Liu (MSUFS-702). Adult, *Plectrodera scalaris* [Coleoptera: Cerambycidae] from laboratory colony. 18 Dec 2001. USA: East Lansing, Michigan.

8115 LS Bauer and H Liu (MF-204). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.

Lecanicillium longisporum (Petch) Zare & W Gams
[Sordariomycetes: Hypocreales]

Cordycipitaceae. Segregate species in *Lecanicillium lecanii* species complex; formerly classified as *Verticillium lecanii* (Zimmermann) Viégas

4050 T Steenberg (299). *Tachyporus hypnorum* [Coleoptera: Staphylinidae]. Mar 1992. Denmark: Copenhagen, Tåstrup, Zealand.

Lecanicillium muscarium (Petch) Zare & W Gams
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Segregate species in *Lecanicillium lecanii* species complex; formerly classified as *Verticillium lecanii* (Zimmermann) Viégas

1328 TJ Poprawski (084). Egg, *Hypera postica* [Coleoptera: Curculionidae]. 17 May 1983. France: Chichery.

1335 S Balazy (1539). Larva, *Malachius bipustulatus* [Coleoptera: Melyridae] under the stem bark of *Quercus robur* in leafy forest. 24 Apr 1983. Poland: Wielkopolski National Park.

1401 TJ Poprawski (089). Egg, *Hypera postica* [Coleoptera: Curculionidae]. Jun 1983. France.

1402 TJ Poprawski (090). Egg, *Hypera postica* [Coleoptera: Curculionidae]. Jun 1983. France.

1403 TJ Poprawski (091). Egg, *Hypera postica* [Coleoptera: Curculionidae]. Jun 1983. France.

4033 T Steenberg (239). *Sitona lineatus* [Coleoptera: Curculionidae]. Mar 1991. Denmark: Næstved, Zealand.

4036 T Steenberg (244). Pupa, *Dendroctonus micans* [Coleoptera: Scolytidae]. Rec'd Nov 1993. Denmark.

7248 JM Sung (EFCC 2011). [Coleoptera: Curculionidae]. 20 May 1998. Republic of Korea: Guryungryung, Kangwon-do.

8048 HH Kope (PFC 5). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Eve River, Vancouver Island, British Columbia. 50°17' N, 126°18' W.

8049 HH Kope (PFC 6). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Eve River, Vancouver Island, British Columbia. 50°17' N, 126°18' W.

8050 HH Kope (PFC 9). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Pacific Forestry Centre Arboretum, Vancouver Island, British Columbia. 48°28' N, 124°24' W.

8051 HH Kope (PFC 10). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Nimpkish, Vancouver Island, British Columbia. 50°19' N, 126°54' W.

8052 HH Kope (PFC 11). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Nimpkish, Vancouver Island, British Columbia. 50°19' N, 126°54' W.

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Lecanicillium muscarium *Metarhizium* sp.

- 8053 HH Kope (PFC 12). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Cowichan Lake, Vancouver Island, British Columbia. 48°50' N, 124°06' W.
- 8054 HH Kope (PFC 15). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Pacific Forestry Centre Arboretum, Vancouver Island, British Columbia. 48°28' N, 124°24' W.
- 8114 LS Bauer and H Liu (MF-203). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.
- 8118 LS Bauer and H Liu (MF-208). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 14 Dec 2005. USA: Brighton, Michigan.
- 8157 LS Bauer and H Liu (MF-248). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 28 Jul 2006. USA: Brighton, Michigan.
- 8163 LS Bauer and H Liu (MF-254). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 28 Jul 2006. USA: Ann Arbor, Michigan.
- 8165 LS Bauer and H Liu (MF-257). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 10 Aug 2006. USA: Ann Arbor, Michigan.
- 8923 [ERL 281] BL Parker (AVRDC 0588B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9267 Z Demirbag and E Tanyeli (Dm-1). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.
- 9268 Z Demirbag and E Tanyeli (Dm-2). *Dendroctonus micans* [Coleoptera: Scolytidae]. 24 Oct 2008. Turkey: Maçka-Zigana, Trabzon.
- Lecanicillium muscarium(?)*** (Petch) Zare & Gams
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Segregate species in *Lecanicillium lecanii* species complex; formerly classified as *Verticillium lecanii* (Zimmermann) Viégas.
- 8162 LS Bauer and H Liu (MF-253). 4th instar larva, *Agrilus planipennis* [Coleoptera: Buprestidae]. 28 Jul 2006. USA: Ann Arbor, Michigan.
- 8265 RJ Pereault (Walton Spray pci#2). *Conotrachelus nenuphar* [Coleoptera: Curculionidae]. Aug 2006. USA: orchard B, Frankfort, Michigan.
- Lecanicillium nr. aranearum*** (Petch) Zare & Gams
[Sordariomycetes: Hypocreales]
Cordycipitaceae. Reclassified from *Verticillium* Section Prostrata for phylogenetically required reasons.
- 9460 [SRCAMB VL-2092] V Likhovidov. [Coleoptera: Lampyridae]. 25 Aug 2006. Russian Federation: Moscow Region. Field Collection Number F-1104.

Lecanicillium pissodis Kope & I. Leal

[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 8055 [DAVFP 29230] HH Kope (PFC 17). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Pacific Forestry Centre Arboretum, Vancouver Island, British Columbia. 48°28' N, 124°24' W.
- 8056 [DAVFP 29231] HH Kope (PFC 18). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Pacific Forestry Centre Arboretum, Vancouver Island, British Columbia. 48°28' N, 124°24' W.
- 8057 [CBS 118231; DAVFP 29232] HH Kope (PFC 19). Adult, cadaver, *Pissodes strobi* [Coleoptera: Curculionidae]. 2003. Canada: Pacific Forestry Centre Arboretum, Vancouver Island, British Columbia. 48°28' N, 124°24' W. CULTURE EX TYPE.

Lecanicillium sp. 2(?) sensu W. Gams & Zare

[Sordariomycetes: Hypocreales]
Cordycipitaceae

- 2832 SR Sánchez Peña (2). [Coleoptera]. Jul 1987. Mexico: elev. 2900 m, Pseudotsuga-Abies forest, Pueblo Nuevo, Durango.

Metarhizium sp.

[Sordariomycetes: Hypocreales]
Clavicipitaceae

- 7493 [CSIRO FI-1358] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 23 Jul 1999. Laboratory infection.
- 7495 [CSIRO FI-1395] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 27 Dec 1999. Australia: Condong, New South Wales.
- 8851 [CSIRO FI-1342] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect A4. Jun 1999. Australia: Condong, New South Wales.
- 8852 [CSIRO FI-1345] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 71. Jun 1999. Australia: Condong, New South Wales.
- 8855 [CSIRO FI-1352] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 420. 23 Jul 1999. Australia: Condong, New South Wales.
- 8856 [CSIRO FI-1353] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 334. 23 Jul 1999. Australia: Condong, New South Wales.
- 8857 [CSIRO FI-1354] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] from Condong insect 349. 23 Jul 1999. Australia: Condong, New South Wales.

- Metarhizium anisopliae sensu lato** (Metschnikoff)
- Sorokin
[Sordariomycetes: Hypocreales]
- Clavicipitaceae. These isolates were identified morphologically and have not yet been reidentified under the genomic classification of Bischoff et al. (2009).
- 725 [CNPAF 82-1-6-02; CP 8] RA Daoust. *Chalcodermus aeneus* [Coleoptera: Curculionidae]. 6 Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
- 760 [CNPAF 82-2-15-03; CP 31] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. Feb 1982. Brazil: CNPAF, Goiânia, Goiás.
- 808 [CNPAF 82-7-23-01; CP 62] RA Daoust ← SM dos Santos. *Coleomegilla maculata* [Coleoptera: Coccinellidae]. 23 Jul 1982. Brazil: CNPAF, Goiânia, Goiás.
- 818 GG Soares (19). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 5 Mar 1982. France: Plougastel-Daoulas, Finistere.
- 929 [CNPAF 82-12-15-01; CP 67] RA Daoust ← SM dos Santos. Larva, *Chalcodermus aeneus* [Coleoptera: Curculionidae]. Dec 1982. Brazil: CNPAF, Goiânia, Goiás.
- 932 [CNPAF 82-12-20-02; CP 70] RA Daoust. [Coleoptera: Bruchidae]. 20 Dec 1982. Brazil: CNPAF, Goiânia, Goiás.
- 939 [CNPAF 83-3-3-03; CP 78] RA Daoust ← SM dos Santos. [Coleoptera: Carabidae]. 3 Mar 1983. Brazil: CNPAF, Goiânia, Goiás.
- 954 [CNPAF 83-03-16L; CP 99] RA Daoust and BP Magalhães. [Coleoptera: Bruchidae]. 16 Mar 1983. Brazil: Ponta Porã, Mato Grosso.
- 1056 [CNPS 25] F Moscardi. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 1983. Brazil: Londrina, Paraná.
- 1280 DW Roberts (MaT3JB-C) or (single spore isolate #1). *Popillia japonica* [Coleoptera: Scarabaeidae]. 1978. USA: Clinton Corners, New York.
- 1377 [ARSEF ?396] S Keller (48). *Agriotes sputator* [Coleoptera: Elateridae]. 4 May 1977. Switzerland.
- 1885 [CP 174] DW Roberts ← SM dos Santos. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. 23 Apr 1985. Brazil: CNPAF, Goiânia, Goiás.
- 1901 DW Roberts ← MA Naves (CG-6). [Coleoptera: Carabidae]. Jan 1980. Brazil: Pará.
- 1903 DW Roberts (103a). *Conoderus* sp. [Coleoptera: Elateridae]. Acc'd 11 Jun 1985. USA.
- 1958 [CNPAF 85-7-24-1; CP 184] JC Lord and BP Magalhães. *Diabrotica speciosa* [Coleoptera: Chrysomelidae]. 24 Jul 1985. Brazil: Ribeira do Pombal, Bahia.
- 1989 [ARSEF 1452 (deaccessioned); CNPAF 53; CP 126] F Moscardi. *Sternechus subsignatus* [Coleoptera: Curculionidae]. 27 Mar 1984. Brazil: Soybean Center, Londrina, Paraná.

- 2076 [CP 194] JC Lord and BP Magalhães. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 1985. Brazil: CNPAF, Goiânia, Goiás.
- 2077 [CP 195] JC Lord and BP Magalhães. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 1985. Brazil: CNPAF, Goiânia, Goiás.
- 2135 T Searle (F). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Jul 1985. Canada: Southern Québec.
- 2136 T Searle (K). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Jul 1985. Canada.
- 2137 T Searle (Q). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Jul 1985. Canada: Southern Québec.
- 2138 T Searle (W). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Jul 1985. Canada: Southern Québec.
- 2139 T Searle (Z). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Aug 1985. Canada: Southern Québec.
- 2156 BN Muthappa (PNG 12711). Adult, *Oryctes* sp. [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2163 BN Muthappa (PNG 12722). Larva, [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2165 BN Muthappa (PNG 12724). Larva, *Oryctes* sp. [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2166 BN Muthappa (PNG 12726). Larva, *Oryctes* sp. [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2167 BN Muthappa (PNG 12727). Larva, *Oryctes* sp. [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2513 [CP 236A] SM dos Santos. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Oct 1986. Brazil: CNPAF, Goiânia, Goiás.
- 2548 SV Krueger ← FL Consolie and MG Villani. *Popillia japonica* [Coleoptera: Scarabaeidae]. Oct 1987. USA: Sleepy Hollow, New York.
- 2635 [CNPAF 88-5-6B; CP 253] DW Roberts ← E Dias Quintela. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 6 May 1988. Brazil: CNPAF, Goiânia, Goiás.
- 2941 [CP 272] SP Wraight ← DR Sosa-Gómez. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. 8 Nov 1988. Brazil: CNPAF, Goiânia, Goiás.
- 3056 [MAF F11] T Glare. *Costelytra zealandica* [Coleoptera: Scarabaeidae]. Rec'd Oct 1990. New Zealand: Canterbury Plains, South Island.
- 3057 [MAF F12] T Glare. *Costelytra zealandica* [Coleoptera: Scarabaeidae]. Rec'd Oct 1990. New Zealand: South Island.
- 3148 INRA (Ma-181) ← A Caudal. *Haphochelus marginalis* [Coleoptera]. May 1983. France: Réunion.
- 3305 J Gutierrez Samperio (21) ← ERD Reyes. *Geraeus senilis* [Coleoptera: Curculionidae] on corn. 1990. Mexico: Colima.

- 3306 J Gutierrez Samperio (22) ← ERD Reyes. *Geraeus senilis* [Coleoptera: Curculionidae] on corn. 1990. Mexico: Colima.
- 3308 J Gutierrez Samperio (24) ← ERD Reyes. *Geraeus senilis* [Coleoptera: Curculionidae] on corn. 1990. Mexico: Colima.
- 3329 DW Roberts ← AS Martins (A-1). 3rd instar larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. Spring 1988. Portugal: Terceira Island, Azores.
- 3330 SV Krueger (MaJB1). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3331 SV Krueger (MaJB2). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3332 SV Krueger (MaJB3). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3333 SV Krueger (MaJB6). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3334 SV Krueger (MaJB7). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3335 SV Krueger (MaJB8). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3336 SV Krueger (MaJB9). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3337 SV Krueger (MaJB10). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3338 SV Krueger (MaJB11). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3339 SV Krueger (MaJB12). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3340 SV Krueger (MaJB13). *Popillia japonica* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3389 I Majchrowicz (T-11-4). *Tribolium castaneum* [Coleoptera: Tenebrionidae] on apple. 16 Jul 1991. USA: Seto Farm, Granger, Washington.
- 3479 CENARGEN (CG 339). [Coleoptera: Scarabaeidae]. 1991. Brazil: Brasilia, Distrito Federal.
- 3713 RA LeBrun ← J Hanula (C-5). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 3 Jun 1991. USA: Clinton, Connecticut.
- 3720 RA LeBrun ← J Hanula. Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 20 May 1991. USA: Windsor, Connecticut.
- 4125 [DAT 2] AC Rath (F124). *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 2 May 1986. Australia.
- 4132 [DAT 11] AC Rath (F011). Larva, *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 1983. Australia: Eyre Pennisular, South Australia.
- 4133 [DAT 12] AC Rath (F012). Larva, *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 1983. Australia: Aldgate, South Australia.
- 4134 [DAT 14] AC Rath (F014). Larva, *Sericethis* sp. [Coleoptera: Scarabaeidae]. 8 May 1986. Australia: Laboratory, Newtown, Tasmania.
- 4137 [DAT 19] AC Rath (F019). Larva, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1986. Australia: Laboratory, Newtown, Tasmania.
- 4138 [DAT 20] AC Rath (F020). Larva, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1 Dec 1986. Australia: NW Coast, Tasmania.
- 4139 [DAT 24] AC Rath (F024). *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 1 Dec 1986. Australia: South Australia.
- 4141 [DAT 29] AC Rath (F029). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1987. Australia: Woodbury, Tasmania.
- 4142 [DAT 36] AC Rath (F036). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1987. Laboratory.
- 4236 [DAT 13] AC Rath (F013). Larva, *Sericethis* sp. [Coleoptera: Scarabaeidae]. 5 Aug 1986. Australia: Laboratory, Newtown, Tasmania.
- 4239 [DAT 34] AC Rath (F034). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1987. Laboratory.
- 4290 [DAT 493] AC Rath (F493) ← W Theunis (SOL IS 17). Adult, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4333 [DAT 483] AC Rath (F483) ← W Theunis (SOL IS 6). Pupa, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4334 [DAT 492] AC Rath (F492) ← W Theunis (SOL IS 16). Larva(L3), [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4335 [DAT 484] AC Rath (F484) ← W Theunis (SOL IS 7). Larva(L3), [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4336 [DAT 488] AC Rath (F488) ← W Theunis (SOL IS 12). Adult, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4337 [DAT 490] AC Rath (F490) ← W Theunis (SOL IS 14). Larva(L3), [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4338 [DAT 486] AC Rath (F486) ← W Theunis (SOL IS 11). Pupa, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4339 [DAT 485] AC Rath (F485) ← W Theunis (SOL IS 10). Pupa, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4340 [DAT 489] AC Rath (F489) ← W Theunis (SOL IS 14). Pupa, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4341 [DAT 487] AC Rath (F487) ← W Theunis (SOL IS 12). Adult, [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4346 [DAT 33] AC Rath (F033). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. Rec'd 6 Jun 1994. Australia: Woodbury, Tasmania.
- 4557 [DAT 481] AC Rath (F481). Pupa, [Coleoptera]. 22 Jun 1993. Solomon Islands.

- 4558 Pupa, [Coleoptera]. 22 Jun 1993. Solomon Islands.
- 4568 [DAT 510] AC Rath (F510). Larva, *Sericesthis micans* [Coleoptera: Scarabaeidae]. 11 Feb 1994. Australia: New South Wales.
- 4572 [DAT 479] AC Rath (F479) ← W Theunis (SOL IS 2). 3rd instar larva, [Coleoptera]. 22 Jun 1993. Solomon Islands.
- 4574 [DAT 516] AC Rath (F516). 3rd instar larva, *Anoplognathus hirsutus* [Coleoptera: Scarabaeidae]. 10 Mar 1994. Australia: Glen Innes, New England, New South Wales.
- 4582 [DAT 478] AC Rath (F478) ← W Theunis (SOL IS1). 3rd instar larva, [Coleoptera]. 22 Jun 1993. Solomon Islands.
- 4677 [DAT 433] AC Rath (F433). Adult, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. Summer 1990. Australia: Dairy Research Unit, Elliott, Tasmania.
- 4716 [DAT 28] AC Rath (F028). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1987. Australia: Woodbury, Tasmania.
- 4722 [DAT 141] AC Rath (F141). Larva, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. Spring 1989. Australia: Wilmot, Tasmania.
- 4777 [DAT 507] AC Rath (F507). Larva, *Sericesthis micans* [Coleoptera: Scarabaeidae]. 25 Oct 1993. Australia: Glen Innes, New England, New South Wales.
- 4778 [DAT 511] AC Rath (F511). Larva, *Sericesthis micans* [Coleoptera: Scarabaeidae]. 11 Feb 1994. Australia: New South Wales.
- 4779 [DAT 512] AC Rath (F512). 3rd instar larva, *Anoplognathus hirsutus* [Coleoptera: Scarabaeidae]. 24 Feb 1994. Australia: Glen Innes, New England, New South Wales.
- 4780 [DAT 513] AC Rath (F513). Larva, *Sericesthis nigrolineata* [Coleoptera: Scarabaeidae]. 10 Mar 1994. Australia: Glen Innes, New England, New South Wales.
- 4819 JD Vandenberg (63). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4820 JD Vandenberg (18). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4821 JD Vandenberg (29). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4822 JD Vandenberg (JP1). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4823 JD Vandenberg (21). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4824 JD Vandenberg (29-2). Adult, *Otiorhynchus ligustici* [Coleoptera: Curculionidae] on *Medicago sativa* L., alfalfa. 26 Jun 1994. USA: Alfalfa field, Great Bend, New York.
- 4907 LA Lacey (95009). *Popillia japonica* [Coleoptera: Scarabaeidae]. Dec 1994. Portugal: Terceira Island, Azores.
- 4908 LA Lacey (95010). *Popillia japonica* [Coleoptera: Scarabaeidae]. Dec 1994. Portugal: Terceira Island, Azores.
- 5624 I Vänninen (SF85-60). Larva, *Tribolium castaneum* [Coleoptera: Tenebrionidae] as bait from soil. 18 Jul 1985. Finland: Lapinjärvi, Uudenmaan Lääni.
- 5837 T Steenbergh (SSL 14). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from larva of *Agrotis segetum* [Lepidoptera: Noctuidae].
- 5841 T Steenbergh (SSL 32). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from *Anotylus* sp. [Coleoptera: Staphylinidae].
- 5842 T Steenbergh (SSL 50). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from soil.
- 5848 T Steenbergh (SSL 75). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from larvae of an unidentified beetle [Coleoptera].
- 5850 T Steenbergh (SSL 84). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from an unidentified beetle [Coleoptera].
- 6388 TL Dubois (FS 3 # 1 (3)) ← SM Smith ← V D'Amico. Larva, late instar, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] on twig. 19 Mar 1999. USA: Laboratory colony, USDA Forest Service, Hamden, Connecticut. Laboratory colony started from host originally obtained from infested maple wood collected in Chicago, Illinois, USA 5 March 1999.
- 6389 TL Dubois (SS 1 # 2 (1)) ← SM Smith. Larva, early instar, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] from wood of *Acer* sp. 23 Mar 1999. USA: USDA APHIS ANG Base, Otis, Massachusetts. Laboratory colony started from host originally obtained from infested maple wood collected in Chicago, Illinois, USA 5 March 1999.
- 6549 D Chandler (HRI 189.83). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 13 Jul 2000. United Kingdom.

- 6551 D Chandler (HRI 335.92). Larva, *Agriotes* sp. [Coleoptera: Elateridae]. Rec'd 13 Jul 2000. United Kingdom.
- 6670 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Harae, Northern Shoa.
- 6671 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Shewa Robin, Northern Shoa.
- 6672 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Kewot, Northern Shoa.
- 6673 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Dedeaa, Northern Shoa.
- 6674 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Rufe Kure, Northern Shoa.
- 6675 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Rober, Northern Shoa.
- 6677 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Dedeaa, Northern Shoa.
- 6678 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Gobenaytu, Northern Shoa.
- 6679 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Sefi Beret, Northern Shoa.
- 6680 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Shewa Robin, Northern Shoa.
- 6682 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Rufe Kure, Northern Shoa.
- 6683 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Awaketu, Northern Shoa.
- 6684 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Awaketu, Northern Shoa.
- 6685 *Pachnoda interrupta* [Coleoptera: Scarabaeidae]. Rec'd 17 Jan 2001. Ethiopia: Kewot, Northern Shoa.
- 6901 I Klingen (NCRI 2/01/Ma). Larva, *Phyllopertha horticola* [Coleoptera: Scarabaeidae] in lawn. 23 May 2001. Norway: Moss, Østfold.
- 7000 LA Lacey (YARL 020128-1). Adult, *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7001 LA Lacey (YARL 020128-2). Adult, *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7002 LA Lacey (YARL 020128-3). Adult, *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7003 LA Lacey (YARL 020128-4). Adult, *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7004 LA Lacey (YARL 011219-7). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7005 LA Lacey (YARL 011219-9). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7006 LA Lacey (YARL 011219-10). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7007 LA Lacey (YARL 011219-11). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7008 LA Lacey (YARL 011219-14). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7009 LA Lacey (YARL 011219-15). *Limonius canus* [Coleoptera: Elateridae] reared in laboratory. Fall 2001. USA: Yakima Agricultural Research Laboratory, Wapato, Washington.
- 7180 H Liu (MSUFS-500). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 5 Feb 2002. USA: Ravenswood, Chicago, Illinois.
- 7411 [CSIRO FI-0151] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 17 Jun 1986. Australia: Mossman, Queensland.
- 7451 [CSIRO FI-0993] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 28 Apr 1993. Australia: Larsen, Kingaroy, Queensland.
- 7452 [CSIRO FI-1041] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 5 Mar 1994. Australia: Tully, Queensland.
- 7492 [CSIRO FI-1350] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 2 Jun 1999. Laboratory experiment.
- 7494 [CSIRO FI-1363] CBS (316.51). *Agriotes* sp. [Coleoptera: Elateridae]. 23 Aug 1999. USA: Forest Grove, Oregon.
- 7496 [CSIRO FI-1402] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 13 Apr 2000. Australia: Bundaberg, Queensland.
- 7498 [CSIRO FI-1410] *Agrianome spinicollis* [Coleoptera: Cerambycidae]. 26 Apr 2000. Australia: Moree, New South Wales.
- 7499 [CSIRO FI-1412] *Agrianome spinicollis* [Coleoptera: Cerambycidae]. 12 May 2000. Australia: Moree, New South Wales.

- 7500 [CSIRO FI-1414] *Agriancome spinicollis* [Coleoptera: Cerambycidae]. 1 Jun 2000. Australia: Moree, New South Wales.
- 7504 [CSIRO FI-1425] *Lepidiota noxia* [Coleoptera: Scarabaeidae]. 18 Aug 2000. Australia: Bundaberg, Queensland.
- 7524 S Keller (714). Larva, *Agriotes* sp. [Coleoptera: Elateridae]. 28 Aug 2001. Switzerland: Jenaz, Graubünden.
- 7527 S Keller (800). Larva, [Coleoptera: Scarabaeidae]. 31 May 2002. Nepal: Parbat District.
- 7529 S Keller (885). Larva, [Coleoptera: Scarabaeidae]. Winter 2003. Nepal: Pang, Parbat District.
- 7532 S Keller (500). Adult, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 16 Jan 1995. Switzerland: Uri.
- 7814 [CSIRO FI-0014] *Sericesthis nigrolineata* [Coleoptera: Scarabaeidae]. 16 Oct 1979. Australia: Anderson, Guyra, New South Wales.
- 7815 [CSIRO FI-0038] *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1 Jun 1981. Australia: Ballarat, Victoria.
- 7816 [CSIRO FI-0083] *Lepidiota squamulata* [Coleoptera: Scarabaeidae]. 5 Aug 1985. Australia: Mackay, Queensland.
- 7819 [CSIRO FI-0111] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 30 Oct 1985. Australia: The Hummock, Bundaberg, Queensland.
- 7824 [CSIRO FI-0126] *Lepidiota gibbifrons* [Coleoptera: Scarabaeidae]. Jan 1986. Australia: Yeppoon, Queensland.
- 7825 [CSIRO FI-0143] *Lepidiota gibbifrons* [Coleoptera: Scarabaeidae]. 2 Apr 1986. Australia: Yeppoon, Queensland.
- 7826 [CSIRO FI-0144] *Lepidiota gibbifrons* [Coleoptera: Scarabaeidae]. 2 Apr 1986. Australia: Yeppoon, Queensland.
- 7827 [CSIRO FI-0148] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 17 Jun 1986. Australia: Mossman, Queensland.
- 7828 [CSIRO FI-0150] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 17 Jun 1986. Australia: Mossman, Queensland.
- 7829 [CSIRO FI-0154] *Lepidiota frenchi* [Coleoptera: Scarabaeidae]. 28 Jul 1986. Australia: Gordonvale, Queensland.
- 7830 [CSIRO FI-0157] *Lepidiota frenchi* [Coleoptera: Scarabaeidae]. 28 Jul 1986. Australia: Gordonvale, Queensland.
- 7831 [CSIRO FI-0160] *Lepidiota frenchi* [Coleoptera: Scarabaeidae]. 28 Jul 1986. Australia: Gordonvale, Queensland.
- 7832 [CSIRO FI-0165] *Lepidiota negatoria* [Coleoptera: Scarabaeidae]. 26 Nov 1986. Australia: Maryborough, Queensland.
- 7839 [CSIRO FI-0191] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 5 Feb 1987. Australia: Maryborough, Queensland.
- 7842 [CSIRO FI-0205] *Antitrogus mussoni* [Coleoptera: Scarabaeidae]. 23 Mar 1987. Australia: Yandaren, Bundaberg, Queensland.
- 7843 [CSIRO FI-0912] *Heteronyx* sp. [Coleoptera: Scarabaeidae]. 23 Jun 1992. Australia: Queensland.
- 7844 [CSIRO FI-0913] *Heteronyx* sp. [Coleoptera: Scarabaeidae]. 23 Jun 1992. Australia: Queensland.
- 7845 [CSIRO FI-0024] *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 2 Jan 1981. Australia: South Australia.
- 7846 [CSIRO FI-0149] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 17 Jun 1986. Australia: Mossman, Queensland.
- 7854 [CSIRO FI-0190] Adult, *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 5 Feb 1987. Australia: Maryborough, Queensland.
- 7863 [CSIRO FI-0211] *Sericesthis nigrolineata* [Coleoptera: Scarabaeidae]. 22 May 1987. Australia: Canberra, Australian Capital Territory.
- 7864 [CSIRO FI-0214] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 22 May 1987. Australia: Childers, Queensland.
- 7865 [CSIRO FI-0218] *Antitrogus mussoni* [Coleoptera: Scarabaeidae]. 10 Jun 1987. Australia: Calavos, Bundaberg, Queensland.
- 7931 [CSIRO FI-0377] *Antitrogus mussoni* [Coleoptera: Scarabaeidae]. 10 Mar 1989. Australia: Maidements, Bundaberg, Queensland.
- 7932 [CSIRO FI-0378] Adult, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 28 Mar 1989. Australia: Busselton, Western Australia.
- 7933 [CSIRO FI-0380] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 28 Mar 1989. Australia: Busselton, Western Australia.
- 7934 [CSIRO FI-0381] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 28 Mar 1989. Australia: Busselton, Western Australia.
- 7935 [CSIRO FI-0382] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 28 Mar 1989. Australia: Busselton, Western Australia.
- 7936 [CSIRO FI-0383] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 28 Mar 1989. Australia: Busselton, Western Australia.
- 8098 [CSIRO FI-0658] [Coleoptera: Curculionidae]. 29 May 1990. CSIRO, Nematodes Laboratory.
- 8099 [CSIRO FI-0659] [Coleoptera: Curculionidae]. 29 May 1990. CSIRO, Nematodes Laboratory.
- 8492 [CSIRO FI-0012] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 16 Oct 1979. Australia: McKemeys, Guyra, New South Wales.

- 8495 [CSIRO FI-0019] Pupa, *Rhopaea verreauxii* [Coleoptera: Scarabaeidae]. 13 Feb 1980. Australia: Dorrigo, New South Wales.
- 8499 [CSIRO FI-0396] *Phyllophaga anxia* [Coleoptera: Scarabaeidae]. 29 Mar 1989. Canada: Southern Québec.
- 8500 [CSIRO FI-0522] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 27 Jun 1989. Australia: Kingaroy, Queensland.
- 8501 [CSIRO FI-0529] *Lepidiota picticollis* [Coleoptera: Scarabaeidae]. 28 Jul 1989. Laboratory experiment.
- 8543 [CSIRO FI-0804] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8544 [CSIRO FI-0805] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8545 [CSIRO FI-0806] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8546 [CSIRO FI-0807] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8547 [CSIRO FI-0808] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8548 [CSIRO FI-0809] [Coleoptera: Elateridae]. 19 Feb 1991. Australia: Melbourne, Victoria.
- 8549 [CSIRO FI-0810] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8550 [CSIRO FI-0811] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8551 [CSIRO FI-0812] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8552 [CSIRO FI-0814] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8553 [CSIRO FI-0815] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8554 [CSIRO FI-0816] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8555 [CSIRO FI-0817] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8556 [CSIRO FI-0818] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8557 [CSIRO FI-0819] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 19 Feb 1991. Australia: Busselton, Western Australia.
- 8558 [CSIRO FI-820] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 18 Feb 1991. Australia: Kingaroy, Queensland.
- 8559 [CSIRO FI-0821] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 18 Feb 1991. Australia: Kingaroy, Queensland.
- 8563 [CSIRO FI-0870] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 1 Jul 1991. Australia: Clermont, Queensland.
- 8564 [CSIRO FI-0871] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 8 Jan 1992. Australia: Clermont, Queensland.
- 8565 [CSIRO FI-0873] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 26 Aug 1991. Australia: Clermont, Queensland.
- 8566 [CSIRO FI-0875] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 26 Aug 1991. Australia: Clermont, Queensland.
- 8567 [CSIRO FI-0877] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 26 Aug 1991. Australia: Clermont, Queensland.
- 8568 [CSIRO FI-0881] *Desiantha diversipes* [Coleoptera: Curculionidae] from root of *Echium* sp. (Boraginaceae). 8 Jan 1992.
- 8569 [CSIRO FI-0882] *Desiantha diversipes* [Coleoptera: Curculionidae]. 8 Jan 1992.
- 8576 [CSIRO FI-0894] *Heteronychus arator* [Coleoptera: Scarabaeidae]. 11 Apr 1992. Australia: Perth, Western Australia.
- 8577 [CSIRO FI-0872] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 26 Aug 1991. Australia: Clermont, Queensland.
- 8582 [CSIRO FI-0903] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 27 Apr 1992. Australia: Kingaroy, Queensland.
- 8583 [CSIRO FI-0904] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 27 Apr 1992. Australia: Kingaroy, Queensland.
- 8586 [CSIRO FI-0910] *Heteronyx* sp. [Coleoptera: Scarabaeidae]. 23 Jun 1992. Australia: Queensland.
- 8592 [CSIRO FI-0920] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 1 Jul 1992. Australia: Queensland.
- 8610 [CSIRO FI-0868] *Heteronyx rugosipennis* [Coleoptera: Scarabaeidae]. 8 Jan 1992. Australia: Clermont, Queensland.
- 8615 [CSIRO FI-0947] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Laboratory infection S465, 610, Queensland.
- 8616 [CSIRO FI-0948] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Laboratory infection S465, 610, Queensland.
- 8617 [CSIRO FI-0950] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Laboratory infection S465, 610, Queensland.
- 8618 [CSIRO FI-0951] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Laboratory infection S465, FI-0686, Queensland.

- 8619 [CSIRO FI-0952] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Laboratory infection S465, FI-0686, Queensland.
- 8620 [CSIRO FI-0953] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Queensland.
- 8621 [CSIRO FI-0954] *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 22 Jul 1992. Australia: Queensland.
- 8733 [CSIRO FI-0153] *Lepidiota frenchi* [Coleoptera: Scarabaeidae]. 28 Jul 1986. Australia: Gordonvale, Queensland.
- 8734 [CSIRO FI-0454] [Coleoptera: Staphylinidae]. 26 Apr 1989. Australia: Parissi pupation study site, Bundaberg, Queensland.
- 8738 [CSIRO FI-1007] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8739 [CSIRO FI-1008] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8740 [CSIRO FI-1009] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8741 [CSIRO FI-1010] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8742 [CSIRO FI-1011] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8743 [CSIRO FI-1012] *Anomola* sp. [Coleoptera: Scarabaeidae]. 1990. Myanmar: Magwe.
- 8744 [CSIRO FI-1040] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 5 Mar 1994. Australia: Tully, Queensland.
- 8745 [CSIRO FI-1081] *Brontispa longissima* [Coleoptera: Chrysomelidae]. 20 May 1994. Australia: Darwin, Northern Territory.
- 8746 [CSIRO FI-1082] *Brontispa longissima* [Coleoptera: Chrysomelidae]. 20 May 1994. Australia: Darwin, Northern Territory.
- 8747 [CSIRO FI-1083] *Brontispa longissima* [Coleoptera: Chrysomelidae]. 20 May 1994. Australia: Darwin, Northern Territory.
- 8748 [CSIRO FI-1107] *Papuana* sp. [Coleoptera: Scarabaeidae]. 14 Dec 1994. Papua New Guinea.
- 8754 [CSIRO FI-1151] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 17 Aug 1995. Australia: Burdekin, Queensland.
- 8755 [CSIRO FI-1152] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 17 Aug 1995. Australia: Burdekin, Queensland.
- 8761 [CSIRO FI-1160] Larva, *Antitrogus consanguineus* [Coleoptera: Scarabaeidae]. May 1996. Australia: Bundaberg, Queensland.
- 8762 [CSIRO FI-1161] Adult, *Rhabdoscelus obscurus* [Coleoptera: Curculionidae]. May 1996. Australia: Northern Queensland, Queensland.
- 8764 [CSIRO FI-1163] Larva, *Anoplognathus* sp. [Coleoptera: Scarabaeidae]. May 1996. Australia: Cooma, New South Wales.
- 8765 [CSIRO FI-1240] 3rd instar larva, *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 1 Sep 1997. Australia: Condong, New South Wales.
- 8766 [CSIRO FI-1241] 3rd instar larva, *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 1 Sep 1997. Australia: Condong, New South Wales.
- 8767 [CSIRO FI-1247] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 12 Sep 1997. Australia: Condong, New South Wales.
- 8775 [ERL 194] BL Parker (AVRDC 0005B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8776 [ERL 195] BL Parker (AVRDC 0009B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8777 [ERL 203] BL Parker (0207B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8778 [ERL 204] BL Parker (AVRDC 0214B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8779 [ERL 205] BL Parker (AVRDC 0216B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8780 [ERL 206] BL Parker (AVRDC 0224B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8781 [ERL 209] BL Parker (AVRDC 0244B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8782 [ERL 211] BL Parker (AVRDC 0260B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8783 [ERL 215] BL Parker (AVRDC 0293B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8784 [ERL 216] BL Parker (AVRDC 0295B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8785 [ERL 218] BL Parker (AVRDC 0312B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8786 [ERL 220] BL Parker (AVRDC 0331B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8787 [ERL 221] BL Parker (AVRDC 0338B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8788 [ERL 222] BL Parker (AVRDC 0344B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8789 [ERL 223] BL Parker (AVRDC 0346B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.

- 8790 [ERL 224] BL Parker (AVRDC 0350B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8791 [ERL 225] BL Parker (AVRDC 0355B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8792 [ERL 227] BL Parker (AVRDC 0373B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8793 [ERL 228] BL Parker (AVRDC 0374B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8794 [ERL 229] BL Parker (AVRDC 0377B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8795 [ERL 329] BL Parker (AVRDC 0193B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 2008. Republic of China: Taiwan.
- 8796 [ERL 330] BL Parker (AVRDC 0205B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8797 [ERL 331] BL Parker (AVRDC 0246B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8798 [ERL 333] BL Parker (AVRDC 0153B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8799 [ERL 334] BL Parker (AVRDC 0168B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8828 [CSIRO FI-1228] *Rhabdoscelus obscurus* [Coleoptera: Curculionidae]. 4 Jun 1997. Australia: Innisfail, Queensland.
- 8829 [CSIRO FI-1242] 3rd instar larva, *Rhopaea magnicornis* [Coleoptera: Scarabaeidae] field infection. 1 Sep 1997. Australia: Condong, New South Wales.
- 8830 [CSIRO FI-1245] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 2 Sep 1997. Laboratory infection.
- 8831 [CSIRO FI-1246] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 2 Sep 1997. Laboratory infection.
- 8832 [CSIRO FI-1249] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 22 Oct 1997. Laboratory experiment. Dose 5 after 1 week.
- 8833 [CSIRO FI-1256] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 2 Sep 1997. Australia: Bundaberg, Queensland.
- 8834 [CSIRO FI-1257] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 2 Sep 1997. Australia: Bundaberg, Queensland.
- 8837 [CSIRO FI-1263] *Cyclocephala* sp. [Coleoptera: Scarabaeidae]. 2 May 1998. Australia: Canberra, Australian Capital Territory.
- 8838 [CSIRO FI-1264] *Cyclocephala* sp. [Coleoptera: Scarabaeidae]. 2 May 1998. Australia: Canberra, Australian Capital Territory.
- 8839 [CSIRO FI-1267] *Dasygnathus dejani* [Coleoptera: Scarabaeidae]. 12 May 1998. Australia: Burdekin, Queensland.
- 8844 [CSIRO FI-1313] *Rhopaea magnicornis* [Coleoptera: Scarabaeidae]. 1 Apr 1999. Australia: Condong, New South Wales.
- 8845 [CSIRO FI-1314] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 4 May 1999. Australia: Mackay, Queensland.
- 8847 [CSIRO FI-1316] *Rhabdoscelus obscurus* [Coleoptera: Curculionidae]. 4 May 1999. Australia: Mackay, Queensland.
- 8848 [CSIRO FI-1320] *Heteronychus arator* [Coleoptera: Scarabaeidae]. 4 May 1999. Australia: Western Australia.
- 8849 [CSIRO FI-1321] *Heteronychus arator* [Coleoptera: Scarabaeidae]. 4 May 1999. Australia: Western Australia.
- 8850 [CSIRO FI-1323] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 6 May 1999. Australia: Mackay, Queensland.
- 8858 [ERL 230] BL Parker (AVRDC 0381B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8859 [ERL 231] BL Parker (AVRDC 0383B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8860 [ERL 234] BL Parker (AVRDC 0390B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8861 [ERL 235] BL Parker (AVRDC 0393B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8862 [ERL 236] BL Parker (AVRDC 0399B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8863 [ERL 237] BL Parker (AVRDC 0402B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8864 [ERL 238] BL Parker (AVRDC 0408B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8865 [ERL 239] BL Parker (AVRDC 0410B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8866 [ERL 240] BL Parker (AVRDC 0411B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8867 [ERL 241] BL Parker (AVRDC 0414B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8868 [ERL 337] BL Parker (AVRDC 0382B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.

- 8869 [ERL 338] BL Parker (AVRDC 0384B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8870 [ERL 340] BL Parker (AVRDC 0388B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8871 [ERL 342] BL Parker (AVRDC 0392B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8872 [ERL 343] BL Parker (AVRDC 0394B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8873 [ERL 345] BL Parker (AVRDC 0397B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8874 [ERL 347] BL Parker (AVRDC 0404B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8875 [ERL 348] BL Parker (AVRDC 0419B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8876 [ERL 349] BL Parker (AVRDC 0420B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8877 [ERL 350] BL Parker (AVRDC 0423B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8878 [ERL 352] BL Parker (AVRDC 0432B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8879 [ERL 353] BL Parker (AVRDC 0437B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8880 [ERL 354] BL Parker (AVRDC 0439B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8881 [ERL 355] BL Parker (AVRDC 0440B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8882 [ERL 356] BL Parker (AVRDC 0441B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8883 [ERL 357] BL Parker (AVRDC 0442B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8884 [ERL 358] BL Parker (AVRDC 0449B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8885 [ERL 359] BL Parker (AVRDC 0450B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8886 [ERL 360] BL Parker (AVRDC 0451B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8887 [ERL 361] BL Parker (AVRDC 0458B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8893 [CSIRO FI-1244] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 2 Sep 1997. Laboratory infection.
- 8894 [ERL 246] BL Parker (AVRDC 0467B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8895 [ERL 247] BL Parker (AVRDC 0468B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8896 [ERL 248] BL Parker (AVRDC 0469B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8897 [ERL 249] BL Parker (AVRDC 0470B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8898 [ERL 251] BL Parker (AVRDC 0477B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8899 [ERL 254] BL Parker (AVRDC 0483B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8900 [ERL 256] BL Parker (AVRDC 0485B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8901 [ERL 258] BL Parker (AVRDC 0492B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8902 [ERL 259] BL Parker (AVRDC 0500B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8903 [ERL 265] BL Parker (AVRDC 0523B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8904 [ERL 270] BL Parker (AVRDC 0549B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8905 [ERL 273] BL Parker (AVRDC 0555B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8906 [ERL 277] BL Parker (AVRDC 0567B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8907 [ERL 283] BL Parker (AVRDC 0592B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8908 [ERL 284] BL Parker (AVRDC 0599B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8909 [ERL 286] BL Parker (AVRDC 0611B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8910 [ERL 287] BL Parker (AVRDC 0612B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.

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Metarhizium anisopliae sensu lato *Metarhizium anisopliae* sensu stricto

- 8911 [ERL 288] BL Parker (AVRDC 0614B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8912 [ERL 362] BL Parker (AVRDC 0459B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8913 [ERL 363] BL Parker (AVRDC 0462B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8914 [ERL 364] BL Parker (AVRDC 0465B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8915 [ERL 365] BL Parker (AVRDC 0493B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8916 [ERL 366] BL Parker (AVRDC 0520B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8941 [ERL 200] BL Parker (AVRDC 0154B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8942 [ERL 201] BL Parker (AVRDC 0166B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8943 [ERL 207] BL Parker (AVRDC 0238B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8944 [ERL 210] BL Parker (AVRDC 0245B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8945 [ERL 212] BL Parker (AVRDC 0262B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8946 [ERL 217] BL Parker (AVRDC 0303B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8947 [ERL 232] BL Parker (AVRDC 0385B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8948 [ERL 233] BL Parker (AVRDC 0389B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8949 [ERL 260] BL Parker (AVRDC 0506B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8950 [ERL 285] BL Parker (AVRDC 0602B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8951 [ERL 329] BL Parker (AVRDC 0193B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8952 [ERL 335] BL Parker (AVRDC 0184B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8953 [ERL 336] BL Parker (AVRDC 0186B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8954 [ERL 341] BL Parker (AVRDC 0376B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 8955 [ERL 346] BL Parker (AVRDC 0398B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9217 B Kumashiro. *Blosyrus asellus* [Coleoptera: Curculionidae]. Rec'd 8 Jul 2009. USA: Pearl City, Hawaii.
- 9218 B Kumashiro. *Blosyrus asellus* [Coleoptera: Curculionidae]. Rec'd 8 Jul 2009. USA: sweet potato farm, Waipio, Hawaii.
- 9235 [ERL 276] BL Parker (AVRDC 0561B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9236 [ERL 328] BL Parker (AVRDC 0076B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9372 A Morales (#1B). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 5 Nov 2004. USA: Battle Island State Park Golf Course, Fulton, New York.
- 9373 A Morales (#3). Larva, *Amphimallon majale* [Coleoptera: Scarabaeidae]. 2 Nov 2004. USA: Wayne Hills Country Club, Lyons, New York.
- 9374 A Morales (#6). Adult, *Listronotus maculicollis* [Coleoptera: Curculionidae]. 29 Jun 2005. USA: Robert Trent Jones Golf Course at Cornell University, Ithaca, New York.
- 10469 [CSIRO FI-1045] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 5 Mar 1994. Australia: Tully, Queensland. Patented, commercialized strain (Bio-Cane). **RESTRICTED ACCESS: consult Curator.**
- Metarhizium anisopliae** sensu stricto (Metschnikoff) Sorokin
[Sordariomycetes: Hypocreales]
Clavicipitaceae. These isolates have been confirmed to belong in this narrowly redefined species in an emergent genetically based classification
- 2223 KJ Marshall. *Brontispa longissima* [Coleoptera: Chrysomelidae] from artificial production. Jun 1986. Western Samoa: Vaoala, Apia.
- 2518 [CP 224] *Conoderus* sp. [Coleoptera: Elateridae]. Acc'd 8 Dec 1987. New Zealand.
- 3924 DR Sosa-Gómez (CNPSo-Ma58) ← LJ Oliveira. *Phyllophaga cuyabana* [Coleoptera: Scarabaeidae]. 22 Nov 1990. Brazil: Boa Esperança, Paraná.
- 6546 D Chandler (HRI 36.79). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 13 Jul 2000. United Kingdom.

- 7450 [CSIRO FI-0976] Larva, *Heteronyx piceus* [Coleoptera: Scarabaeidae]. 11 Jun 1992. Australia: Queensland.
- 10472 C Thamarai Chelvi (1). *Holotrichia serrata* [Coleoptera: Scarabaeidae]. 25 Aug 2009. India: Bannari Amman Sugar Mill area, Sathyamangalam, Tamil Nadu.
- 10475 C Thamarai Chelvi (4). *Holotrichia consanguinea* [Coleoptera: Scarabaeidae]. 6 Apr 2010. India: Timiri village, Vellore Sugar Mill area, Vellore, Tamil Nadu.
- 10476 C Thamarai Chelvi (5). *Holotrichia serrata* [Coleoptera: Scarabaeidae]. 2 Mar 2010. India: Salem Sugar Mill area, Rasipuram, Tamil Nadu.

Metarhizium anisopliae var. *lepidiotae* Driver, Milner & Trueman
 [Sordariomycetes: Hypocreales]

Clavicipitaceae. Species remaining here need genomic confirmation before reclassification under the emergent classification of Bischoff et al. (2009), presumably to *M. lepidiotae*.

- 7453 [ARSEF 7488; CSIRO FI-1042] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 5 Mar 1994. Australia: Tully, Queensland.
- 8732 [CSIRO FI-0147] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 29 May 1986. Australia: Mossman, Queensland. CULTURE EX TYPE.

Metarhizium anisopliae var. *majus* (Johnston)
 Tulloch
 [Sordariomycetes: Hypocreales]

Clavicipitaceae. Species remaining here need genomic confirmation before reclassification, presumably as *M. majus*, under the classification of Bischoff et al. (2009).

- 297 KJ Marschall. Larva, *Xyloryctes jamaicensis* [Coleoptera: Scarabaeidae]. 22 Nov 1978. Western Samoa: Apia.
- 298 RS Soper. Larva, *Xyloryctes jamaicensis* [Coleoptera: Scarabaeidae]. Acc'd 22 Feb 1979. Western Samoa: Apia.
- 2151 MC Rombach (170386-1). Larva, *Oryctes rhinoceros* [Coleoptera: Scarabaeidae]. 17 Mar 1986. Indonesia: Ciamis, Jawa Barat, Java.
- 3145 INRA (Ma-51) ← A Gandard. *Oryctes rhinoceros* [Coleoptera: Scarabaeidae]. Jan 1971. France: La Minière.

Metarhizium brunneum Petch
 [Sordariomycetes: Hypocreales]

Clavicipitaceae. Restored from synonymy variously with *M. anisopliae* and *M. album* as part of the genomic classification of Bischoff et al. (2009).

- 346 [CSIRO FI24] *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. Acc'd 4 Apr 1980. Australia: Adelaide, South Australia.

- 472 [CSIRO FI55; DAR 29768] J Walker ← A Wescott. [Coleoptera: Scarabaeidae]. Sep 1977. Australia: BCRI, R.D. 66, Rydalmere, New South Wales.
- 817 GG Soares (17). 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 5 Mar 1982. France: Plougastel-Daoulas, Finistere.
- 820 GG Soares (A7) ← M Marchal. 6th instar larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Jan 1982. France: Angers, Maine-et-Loire.
- 1066 [ARSEF ?397] TJ Poprawski ← S Keller (92). Adult, *Melolontha melolontha* [Coleoptera: Scarabaeidae]. 29 May 1981. Switzerland: Iselisberg.
- 2107 [CBS 316.51; IMI 014746; NRRL 1944; QM 191] MC Rombach ← KB Raper and LP Rockwood. Larva, *Agriotes* sp. [Coleoptera: Elateridae]. 29 Jun 1933. USA: Forest Grove, Oregon. Ex-type isolate.
- 2210 [ARSEF 2225] MC Rombach (140486-1) ← H Beddu Rewa. [Coleoptera: Curculionidae] on palm tree. 22 Mar 1986. Indonesia: Baritiwurung (Butterfly Valley), nr. Ujungpandang, Sulawesi Selatan, Celebes.
- 2224 MC Rombach (140486). [Coleoptera: Curculionidae]. 14 Apr 1986. Indonesia.
- 3864 LA Lacey (92141). *Popillia japonica* [Coleoptera: Scarabaeidae]. 22 Oct 1992. Portugal: Terceira Island, Azores.
- 4020 T Steenberg (211) ← HP Ravn. *Sitona lineatus* [Coleoptera: Curculionidae]. Jul 1990. Denmark: Silkeborg, Århus.
- 4131 [DAT 10] AC Rath (F010). *Aphodius tasmaniae* [Coleoptera: Scarabaeidae]. 1983. Australia: Waitpinga, South Australia.
- 4228 [CRI 35-79; DAT 120] AC Rath (F120) ← AT Gillespie. Larva, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. 28 Jan 1988. Australia: Crops Research Inst..
- 5198 RA LeBrun (Bio 1020). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 20 May 1996. Germany.
- 5625 I Vänninen (SF85-56). Larva, *Tribolium castaneum* [Coleoptera: Tenebrionidae] as bait from soil. 10 Aug 1985. Finland: Toholampi, Vaasan Lääni.
- 5626 I Vänninen (SF86-38). Larva, *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. Aug 1986. Finland: Pälkäne, Hämeen Lääni.
- 6120 C López Lastra. Larva, *Diloboderus abderus* [Coleoptera: Scarabaeidae] from soil. Nov 1996. Argentina: Lincoln, Buenos Aires.
- 6392 TL Dubois (VD 5 rep b) ← V D'Amico. Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. Rec'd 22 Dec 1999. USA: Laboratory colony, USDA Forest Service, Ansonia, Connecticut.
- 6477 I Klingen (HAG.99). Larva, *Phyllopertha horticola* [Coleoptera: Scarabaeidae] in lawn. 18 Sep 1999. Norway: Moss, Østfold.

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Metarhizium brunneum *Metarhizium majus*

- 7234 AE Hajek (VD-1) ← V D'Amico. Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] reared from wood collected in Chicago, IL. Rec'd 5 Jan 2004. USA: Laboratory colony, USDA Forest Service, Ansonia, Connecticut.
- 8415 AE Hajek (FS6). Larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 5 Mar 1999. USA: Quarantine colony, USDA Forest Service, Ansonia, Connecticut.
- 8416 AE Hajek (VD3). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 26 Sep 1999. USA: Quarantine colony, USDA Forest Service, Ansonia, Connecticut.
- 8417 AE Hajek (VD7). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 20 Jul 1999. USA: Quarantine colony, USDA Forest Service, Ansonia, Connecticut.
- 8418 AE Hajek (VD8). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 10 Jul 1999. USA: Quarantine colony, USDA Forest Service, Ansonia, Connecticut.
- 8419 AE Hajek (VD9). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 8 Jul 1999. USA: Quarantine colony, Ansonia, Connecticut.

Metarhizium flavoviride W Gams & Rozsypal
[Sordariomycetes: Hypocreales]
Clavicipitaceae

- 2024 [ARSEF 1184; INRA Mf-88] CBS (700.74) ← P Ferron. *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Acc'd 23 Oct 1985. France: Brittany, Morbihan.
- 8737 [CSIRO FI-1002] *Lachnostenra bidentata* [Coleoptera: Scarabaeidae]. 11 May 1993. Malaysia: Tapah.

Metarhizium flavoviride* var. *flavoviride
[Sordariomycetes: Hypocreales]
Clavicipitaceae

- 1184 [ARSEF 2024; CBS 700.74; INRA Mf-88] TJ Poprawski ← P Ferron. *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Jan 1974. France: Brittany, Morbihan.
- 4719 [DAT 130] AC Rath (F130). Adult, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1 Sep 1988. Australia: Campbelltown, Tasmania.
- 4720 [DAT 133] AC Rath (F133). Adult, *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1 Sep 1988. Australia: Mt. Morriston, Ross, Tasmania.

Metarhizium frigidum Bischoff & Rehner in Bischoff, SA Rehner & Humber
[Sordariomycetes: Hypocreales]
Clavicipitaceae. See Mycologia 98: 737-745 (2006)

- 4124 [DAT 1] AC Rath (F001) ← Reinganum (124). Larva, *Adoryphorus* sp. [Coleoptera: Scarabaeidae]. 10 Jun 1994. Australia: Ballarat, Victoria. 'Ex type' isolate.

Metarhizium guizhouense QT Chen & HL Guo

[Sordariomycetes: Hypocreales]

Clavicipitaceae. Segregated from the *M. anisopliae* species complex as part of genomic reclassification of Bischoff et al. (2009). Synonym: *M. taii* ZQ Liang & AY Liu. Teleomorph: *Cordyceps taii* ZQ Liang & AY Liu.

- 683 [QEC 433.0] DW Roberts (102381-9). Larva, [Coleoptera: Scarabaeidae] in sugar cane. 23 Oct 1981. PR China: Guanzhou, Kwon Tung.
- 819 GG Soares (21) ← JP Aeschlimann. 5th instar larva, *Sitona discoideus* [Coleoptera: Curculionidae]. 29 Mar 1982. France: Montpellier, Hérault.
- 977 [GCRI 134-82] RA Hall ← A Vey. *Melolontha melolontha* [Coleoptera: Scarabaeidae]. Acc'd 17 Oct 1983. France.
- 3603 IMI (152222) ← Deshpande. *Myllocerus discolor* [Coleoptera: Curculionidae]. Rec'd 26 Feb 1992. India: Mudigere.
- 4604 [DAT 473] AC Rath (F473) ← W Theunis (PNG 1). *Papuana woodlarkiana* [Coleoptera: Scarabaeidae]. 22 Jun 1993. Papau New Guinea: Lae, Morobe Province.

Metarhizium lepidiotae (Driver & Milner) JF Bischoff, SA Rehner & Humber
[Sordariomycetes: Hypocreales]

Clavicipitaceae. Synonym: *M. anisopliae* var. *lepidiotae* Driver et al. (2000; as var. *lepidiotum*). Placement of isolates here has been confirmed under the genomic reclassification of Bischoff et al. (2009).

- 7412 [CSIRO FI-0152] *Lepidiota consobrina* [Coleoptera: Scarabaeidae]. 17 Jun 1986. Australia: Mossman, Queensland.
- 7488 [ARSEF 7453; CSIRO FI-1042] *Dermolepida albohirtum* [Coleoptera: Scarabaeidae]. 5 Mar 1994. Australia: Tully, Queensland. Ex-type isolate used by Driver et al. (2000) to describe *Metarhizium anisopliae* var. *lepidiotae*.

Metarhizium majus (JR Johnston) JF Bischoff, SA Rehner & Humber
[Sordariomycetes: Hypocreales]

Clavicipitaceae. Synonym: *M. anisopliae* var. *majus* (JR Johnston) MC Tulloch. Placement of isolates here has been confirmed under the genomic classification of Bischoff et al. (2009).

- 978 [GCRI 148-82] RA Hall ← A Vey. *Oryctes rhinoceros* [Coleoptera: Scarabaeidae]. Acc'd 17 Oct 1983. France.
- 1858 DW Roberts (Pol-42). [Coleoptera: Scarabaeidae]. Acc'd 19 Mar 1985. Poland.
- 1859 DW Roberts (Pol-32). [Coleoptera: Scarabaeidae]. Acc'd 19 Mar 1985. Poland.
- 1914 MC Rombach. Larva, *Oryctes* sp. [Coleoptera: Scarabaeidae]. Apr 1985. Philippines: nr. Tiaong Experimental Station, Quezon. Ex-epitype isolate for this species.

- 1946 MC Rombach (MMQ). *Oryctes rhinoceros* [Coleoptera: Scarabaeidae]. Acc'd 11 Sep 1985. Philippines: Tiaong Experimental Station, Quezon.
- 4566 [DAT 514] AC Rath (F514). Larva, *Anoplognathus* sp. [Coleoptera: Scarabaeidae]. 10 Mar 1994. Australia: Leighlands, New England, New South Wales.
- 4601 [DAT 515] AC Rath (F515). Larva, *Anoplognathus* sp. [Coleoptera: Scarabaeidae]. 10 Mar 1994. Australia: Glen Innes, New South Wales.
- 7505 [CSIRO FI-1449] *Anoplognathus* sp. [Coleoptera: Scarabaeidae]. 12 Jun 2001. Australia: Northern Queensland, Queensland.

Metarhizium pingshaense QT Chen & HL Guo
 [Sordariomycetes: Hypocreales]
 Clavicipitaceae. Genomically confirmed and distinguished from *M. anisopliae* by the reclassification of Bischoff et al. (2009).

- 538 DW Roberts. *Oryctes rhinoceros* [Coleoptera: Scarabaeidae]. 20 Aug 1980. Thailand.
- 2162 BN Muthappa (PNG 12721). Larva, [Coleoptera: Scarabaeidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2231 K Narayanan (7). *Zygomgramma bicolorata* [Coleoptera: Chrysomelidae]. Rec'd 27 Aug 1986. India.
- 3210 RC Rajak (49). [Coleoptera]. Rec'd 3 Jun 1991. India.
- 3604 IMI (298059). *Scapanes australis* [Coleoptera: Scarabaeidae]. Rec'd 26 Feb 1992. Papua New Guinea.
- 4342 [DAT 491] AC Rath (F491) ← W Theunis (SOL IS 15). Larva(L3), [Coleoptera]. Rec'd 6 Jun 1994. Solomon Islands.
- 4610 [DAT 480] AC Rath (F480) ← W Theunis (SOL IS 4). Pupa, [Coleoptera]. 22 Jun 1993. Solomon Islands.
- 5197 M Browning ← RA LeBrun ← CW McCoy (Mada). *Diaprepes abbreviata* [Coleoptera: Curculionidae]. Rec'd 20 May 1996. USA: Florida.
- 7410 [CSIRO FI-0114] *Antitrogus parvulus* [Coleoptera: Scarabaeidae]. 30 Oct 1985. Australia: The Hummock, Bundaberg, Queensland.
- 7417 [CSIRO FI-0295] *Antitrogus mussoni* [Coleoptera: Scarabaeidae]. 13 Oct 1988. Australia: Bundaberg, Queensland.
- 7435 [CSIRO FI-0700] *Costelytra zealandica* [Coleoptera: Scarabaeidae]. 8 Oct 1990. New Zealand: South Island.
- 8420 AE Hajek (WU19). Adult, *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. 25 Jul 2000. PR China: Wuhe, Anhui.

Metarhizium robertsii JF Bischoff, SA Rehner & Humber
 [Sordariomycetes: Hypocreales]
 Clavicipitaceae. Segregated from *M. anisopliae* as part of a genomic reclassification by Bischoff et al. (2009). A complete genomic sequence of ARSEF 8820 (a single-spored reisolate of ARSEF 2575) is being compiled.

- 23 RS Soper (F84-1-1) ← RL Rabb. *Conoderus* sp. [Coleoptera: Elateridae]. 1961. USA: North Carolina.
- 724 [CNPAF 82-2-15-04; CP 25] RA Daoust. *Cerotoma arcuata* [Coleoptera: Chrysomelidae]. Feb 1982. Brazil: CNPAF, Goiânia, Goiás.
- 797 DA Rodriguez Sierra. Larva, *Ancognatha scarabaeoides* [Coleoptera: Scarabaeidae]. Jun 1981. Colombia: Madrid, Cundinamarca.
- 1046 J Aoki (Met. 6) ← K Yanase. *Popillia japonica* [Coleoptera: Scarabaeidae]. Jul 1977. Japan: Fuchu, Tokyo Prefecture.
- 1298 DW Roberts (MaT3JB-B) or (single spore isolate #9). *Popillia japonica* [Coleoptera: Scarabaeidae]. Feb 1978. USA: Clinton Corners, New York.
- 1878 DW Roberts (MaT3JB-A). *Popillia japonica* [Coleoptera: Scarabaeidae]. 1978. USA: Clinton Corners, New York.
- 1897 DW Roberts (V-14 (F84 mutant)). *Conoderus* sp. [Coleoptera: Elateridae]. Acc'd 11 Jun 1985. USA: California.
- 1910 DW Roberts ← S Keller (Ma52(S4)). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Acc'd 18 Jun 1985. Germany.
- 1968 DR Smitley. *Strigoderma arboricola* [Coleoptera: Scarabaeidae]. Aug 1985. USA: East Lansing, Michigan.
- 2134 T Searle (E). *Phyllophaga ?anxia* [Coleoptera: Scarabaeidae]. Jul 1985. Canada: Southern Québec.
- 2469 JK Liebherr. Larva, [Coleoptera: Carabidae]. 24 Aug 1987. Mexico: 10.5 km S of Amecameca, Tepetlixpa, Mexico.
- 2514 [CP 236B] SM dos Santos. *Diabrotica* sp. [Coleoptera: Chrysomelidae]. Oct 1986. Brazil: CNPAF, Goiânia, Goiás.
- 2547 SV Krueger ← FL Consolie and MG Villani. *Rhizotrogus majalis* [Coleoptera: Scarabaeidae]. Oct 1987. USA: Syracuse, New York.
- 2575 [ATCC MYA-3093; IMI I91-613] RJ St. Leger (ME-1) ← Tate and Lyle Ltd (Batch No. B1830). *Curculio caryae* [Coleoptera: Curculionidae]. Acc'd 21 Jul 1988. USA: South Carolina. Ex-type culture; a complete genomic sequencing is being obtained for a single-spored reisolate (ARSEF 8820) of this isolate.
- 2981 T Searle (CWMA). Larva, *Listronotus oregonensis* [Coleoptera: Curculionidae]. 1988. Canada: Saint-Jean, Québec.
- 3108 SV Krueger (MaEC1). *Rhizotrogus majalis* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.

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- 3211 SV Krueger (MaEC2). *Rhizotrogus majalis* [Coleoptera: Scarabaeidae]. Nov 1989. USA: Syracuse, New York.
- 3388 I Majchrowicz (3a). *Tribolium castaneum* [Coleoptera: Tenebrionidae] on asparagus. 16 Jul 1991. USA: Orchard Farm, Yakima, Washington.
- 3608 [ARSEF 2575] IMI (I91-613) ← RJ St. Leger (ME-1) ← Tate and Lyle Ltd (Batch No. B1830). *Curculio caryae* [Coleoptera: Curculionidae]. Rec'd 26 Feb 1992. USA.
- 3721 RA LeBrun ← J Hanula. Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 3 Jun 1991. USA: Clinton, Connecticut.
- 4123 [ARSEF 2547] L Marold (ARSEF2547). *Rhizotrogus majalis* [Coleoptera: Scarabaeidae]. Rec'd 2 May 1994. USA: Syracuse, New York. Replaces ARSEF 2547.
- 5149 DL Hostetter (T100) ← IOB Armas. Larva, *Popillia japonica* [Coleoptera: Scarabaeidae] soil, pasture. 23 Jan 1996. Portugal: Terceira Island, Azores.
- 6472 SR Grugel. *Dectes texanus* [Coleoptera: Cerambycidae]. 3 Nov 1998. USA: Goodland, Kansas.
- 7424 [CSIRO FI-0358] Larva, *Heteronychus arator* [Coleoptera: Scarabaeidae]. 8 Feb 1989. Australia: Busselton, Western Australia.
- 7449 [CSIRO FI-0911] *Heteronyx* sp. [Coleoptera: Scarabaeidae]. 23 Jun 1992. Australia: Queensland.

Mixed Culture sp.

The two members in these mixed cultures have not been successfully separated.

- 1043 J Aoki (Paec. 1). *Pyrrhalta fuscipennis* [Coleoptera: Chrysomelidae]. May 1973. Japan: Towada City, Aomori Prefecture. Single Spore Isolation attempted 8vi95. Mixture of PAESP @ VERTSP.
- 4387 LA Lacey (94138). *Holotrichia parallela* [Coleoptera: Scarabaeidae]. 5 May 1994. China: Cangzhou. Paecilomyces fumosoroseus and Beauveria brongniartii.
- 5188 S Gouli (GA-98). [Coleoptera: Lampyridae]. 26 May 1995. USA: Motyka's sugar maple stand, Williamstown, Vermont.

Mucor circinelloides van Tieghem

[Mucormycotina: Mucorales]
Mucoraceae

- 6470 LS Bauer (2UIC2463). Larva, *Anoplophora glabripennis* [Coleoptera: Cerambycidae] from laboratory colony, USDA Forest Service, NCRS. Rec'd 19 Feb 2000. USA: East Lansing, Michigan.

Ophiocordyceps aphodii (Mathieson) GH Sung, JM Sung, Hywel-Jones & Spatafora

[Sordariomycetes: Hypocreales]
Ophiocordycitaceae. Synonym: *Cordyceps aphodii* Mathieson

- 5498 [ATCC 34178; CBS 150.47] Larva, *Aphodius howitti*

[Coleoptera: Scarabaeidae]. Rec'd 5 Jun 1997. Location not specified.

Paecilomyces sp.

[Sordariomycetes: Hypocreales]

These still unidentified species has yet been assigned to a correct genus after the recent gene-based reclassification of species out of *Paecilomyces* Section *Isarioidea*; this original generic identification remains provisional until a more thorough analyses of these isolates are completed.

- 5184 S Gouli (GA-94). [Coleoptera: Curculionidae]. 25 Jun 1995. USA: Motyka's sugar maple stand, Williamstown, Vermont.
- 5193 S Gouli (GA-103). [Coleoptera: Curculionidae]. 23 Jun 1995. USA: R. Angellillo's sugar maple stand, North Field, Vermont.

Paecilomyces canadensis (Vuillemin) Brown & Smith

[Sordariomycetes: Hypocreales]

This species is usually treated as a synonym of *Isaria farinosa* but both this and any ultimate reclassification remain to be determined.

- 984 [FPMI 757] J Aoki (Paec. 6) ← K Katagiri ← T Kushida. *Heptophylla picea* [Coleoptera: Scarabaeidae]. Feb 1972. Japan: Hachioji, Tokyo Prefecture.

Pandora blunckii (Lakon ex Zimmerman) Humber

[Entomophthoromycotina: Entomophthorales]

Entomophthoraceae

- 915 S Keller (426). *Athalia rosae* [Coleoptera: Elateridae]. 1 Sep 1982. Switzerland.
- 917 S Keller (425). *Athalia rosae* [Coleoptera: Elateridae]. 1 Sep 1982. Switzerland: Zürich.
- 920 S Keller (430). *Athalia rosae* [Coleoptera: Elateridae]. 1 Sep 1982. Switzerland: Zürich.
- 1715 S Keller (514). *Athalia rosae* [Coleoptera: Elateridae]. 3 Oct 1984. Switzerland: Reckenholz, Zurich.
- 1716 S Keller (515). *Athalia rosae* [Coleoptera: Elateridae]. 3 Oct 1984. Switzerland: Reckenholz, Zurich.
- 1717 S Keller (516). *Athalia rosae* [Coleoptera: Elateridae]. 3 Oct 1984. Switzerland: Reckenholz, Zurich.
- 1718 S Keller (517). *Athalia rosae* [Coleoptera: Elateridae]. 3 Oct 1984. Switzerland: Reckenholz, Zurich.

Paraisaria dubia Samson & BL Brady

[Sordariomycetes: Hypocreales]
Ophiocordycitaceae

- 5764 DG Holdom (900118-01). Larva, *Antitrogus rugulosus* [Coleoptera: Scarabaeidae: Melolonthinae] under sugar cane, in sandy soil. Sep 1990. Australia: On the coastal plain south of Brisbane, Rocky Point, Queensland.

Penicillium sp.

[Eurotiomycetes: Eurotiales]

Trichocomaceae. No species of this genus have been satisfactorily demonstrated to be a primary pathogen of insects. Its presence on or in insect cadavers should be interpreted as necrophytic or accidental.

- 2950 [CP 278] SP Wraight ← E Dias Quintela. *Chalcodermus bimaculatus* [Coleoptera: Curculionidae]. 23 Jun 1989. Brazil: CNPAF, Goiânia, Goiás.
3036 W Mechaber (weevil#2272). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Vaccinium angustifolium*. 20 May 1990. USA: Carver, Massachusetts.

- Pochonia bulbillosa*(?) (W Gams & Malla) Zare & W Gams
[Sordariomycetes: Hypocreales]
Clavicipitaceae

- 3035 W Mechaber (weevil#2209). Adult, *Anthonomus musculus* [Coleoptera: Curculionidae] on *Gaylussacia baccata*. 20 May 1990. USA: Carver, Massachusetts.

- Pochonia chlamydosporia* (Goddard) Zare & W Gams
[Sordariomycetes: Hypocreales]
Clavicipitaceae. Major synonym: *Verticillium chlamydosporium* Goddard

- 3314 M Brownbridge. Larva, [Coleoptera: Scarabaeidae]. Rec'd 19 Mar 1991. USA: Perry's sugar maple stand, Orange County, Vermont.

- Pochonia chlamydosporia* var. *chlamydosporia*
[Sordariomycetes: Hypocreales]
Clavicipitaceae. Synonym: *Verticillium chlamydosporium* Goddard

- 2218 [CNPAF 86-06-05-6; CP 214] DW Roberts ← DMF Capalbo. *Lagria vilosa* [Coleoptera: Lagriidae]. 5 Jun 1986. Brazil: CNPAF, Goiânia, Goiás.

- Polycephalomyces* sp.
[Sordariomycetes: Hypocreales]

- 9496 [SRCAMB VL-1325/1] V Likhovidov. [Coleoptera]. 8 Jul 2003. Russian Federation: Vladivostok, Primorsky Krai. Field Collection Number F-619.
9497 [SRCAMB VL-1951] V Likhovidov. [Coleoptera: Carabidae]. 25 Aug 2005. Belarus: Belavezhskaya Puscha National Park. Field Collection Number F-1106.

- Polycephalomyces formosus* Kobayasi
[Sordariomycetes: Hypocreales]

- 1424 S Balazy (1431). Larva, *Calosoma* sp. [Coleoptera: Carabidae] at ground level in deciduous forest. 29 Jul 1981. Poland: Wielkopolski National Park. Received as *Acremonium terricola* (Miller et al.) W. Gams.

Purpureocillium lilacinum (Thom) Luangsa-ard,

Houbraken, Hywel-Jones & Samson
[Sordariomycetes: Hypocreales]

Synonym: it *Paecilomyces lilacinus*. Ophiocordycipitaceae. This species is the type of a monotypic new genus erected following the phylogenetic reclassification of *Paecilomyces* Section *Isarioidea*. This species can cause human mycoses, mainly of the eye, but probably presents little or no risk if handled with routine sterile microbiological techniques for transfers or bioassay procedures, etc. Avoid chronic and/or large-scale exposure to airborne conidia to minimize any health risks.

- 410 CW McCoy. *Diaprepes abbreviata* [Coleoptera: Curculionidae]. 20 Jul 1979. USA: Apopka, Florida.
723 [CNPAF 82-1-6-10; CP 17] RA Daoust. *Lagria vilosa* [Coleoptera: Lagriidae]. 6 Jan 1982. Brazil: CNPAF, Goiânia, Goiás.
1951 [CENARGEN CG 301; CNPAF 85-05-02; CP 176] R Pereira. *Cerotoma* sp. [Coleoptera: Chrysomelidae]. 2 May 1985. Brazil: Campos, Rio de Janeiro.
2952 [CP 273] SP Wraight ← CA da Silva. *Lagria vilosa* [Coleoptera: Lagriidae]. 8 Nov 1988. Brazil: CNPAF, Goiânia, Goiás.
5876 FE Vega (EBCL 98005). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
5877 FE Vega (EBCL 98008). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
5880 FE Vega (EBCL 98015). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
5882 FE Vega (EBCL 98022). Adult, *Hypothenemus hampei* [Coleoptera: Scolytidae]. Oct 1997. Benin: Niaouli.
6110 BL Parker (SPT-2-279). Adult, [Coleoptera: Scarabaeidae]. 24 Jan 1999. Syria: Al Kseabiiia.
6188 FE Vega (EBCL 99024). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Dec 1998. Benin: Site 3, Niaouli.
6190 FE Vega (EBCL 99027). *Hypothenemus hampei* [Coleoptera: Scolytidae]. Dec 1998. Benin: Site 2, Niaouli.
8918 [ERL 196] BL Parker (AVRDC 0058B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
8919 [ERL 213] BL Parker (AVRDC 0286B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
8920 [ERL 267] BL Parker (AVRDC 0527B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
8921 [ERL 268] BL Parker (AVRDC 0529B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.

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Purpureocillium lilacinum Tolypocladium inflatum

- 8922 [ERL 280] BL Parker (AVRDC 0587B). *Tenebrio molitor* [Coleoptera: Tenebrionidae] as bait from soil. 1994. Republic of China: Taiwan.
- 9371 A Morales (#1A). Larva, *Popillia japonica* [Coleoptera: Scarabaeidae]. 5 Nov 2004. USA: Battle Island State Park Golf Course, Fulton, New York.
- 9524 [SRCAMB VL-2059] V Likhovidov. Larva, [Coleoptera: Elateridae] Isolated from *Cordyceps* sp. Aug 2005. Belarus: Belavezhskaya Puscha National Park. Field Collection Number F-882.

Scopulariopsis sp.

[Sordariomycetes: Microascales]

- 2169 BN Muthappa (PNG 12725). [Coleoptera: Curculionidae]. Rec'd 12 May 1986. Papua New Guinea.
- 2327 TJ Poprawski (8651). Nymph, *Leptinotarsa decemlineata* [Coleoptera: Chrysomelidae] on potato. 6 Nov 1986. France: Cognac, Charente.
- 8421 AE Hajek (WU6). *Anoplophora glabripennis* [Coleoptera: Cerambycidae]. Jul 2000. PR China: Wuhe, Anhui.

Simplicillium lamellicola (FEV Smith) Zare & W Gams

[Sordariomycetes: Hypocreales]

Cordycipitaceae. Major synonym: *Verticillium lamellicola* (F.E.V. Smith) W Gams

- 9479 [SRCAMB VL-1786] V Likhovidov. *Carabus* sp. [Coleoptera: Carabidae]. 29 Aug 2005. Ukraine: Autonomous Republic of Crimea. Field Collection Number F-738.

Sorosporella uvella (Krassiltschik) Giard

[Sordariomycetes: Hypocreales]

Sorosporella is the chlamydosporic state of fungi whose conidial states are classified as *Syngliocladium* species. Clumps of chlamydospores germinate and produce fasciculate synnemata bearing clusters of *Syngliocladium* phialides.

- 1123 PP Sikorowski ← J Kuhre. 4th instar larva, *Curculio caryaee* [Coleoptera: Curculionidae] pecan tree. 14 Dec 1983. USA: West Helena, Arkansas.

Sporothrix insectorum de Hoog & HC Evans

[Sordariomycetes: Ophiostomatales]

Ophiostomataceae

- 9502 [SRCAMB VL-2052] V Likhovidov. Adult, *Carabus* sp. [Coleoptera: Carabidae]. 1993. Russian Federation: Kunashir Island, Sakhalin Region. Field Collection Number F-890.

Sterile mycelium

- 4009 T Steenberg (135) ← A Kirkeby-Thomse. Pupa, [Coleoptera: Cerambycidae] on spruce. Sep 1988. Denmark: Grib Skov, Zealand.

- 4243 [DAT 26] AC Rath (F26). *Adoryphorus coulonii* [Coleoptera: Scarabaeidae]. 1986. Australia: Newtown, Tasmania.

Stilbella buquetii (Montagne & Robin) Samson & HC Evans

[Sordariomycetes: Hypocreales]

- 2915 CBS (511.88). *Artipes* sp. [Coleoptera: Curculionidae]. 1988. USA: Florida.

Synnematium jonesii Speare

[Sordariomycetes: Hypocreales]

Ophiocordycipitaceae

- 5664 [ATCC 44767; IMI 205309] *Promecotheca papuana* [Coleoptera: Hispinae]. Rec'd 10 Feb 1998. Papua New Guinea.

Tilachlidium sp.

[Hyphomycetes]

- 2415 M Shimazu (F-545). [Coleoptera: Elateridae]. 14 Jul 1986. Japan: Hachioji, Tokyo Prefecture.

- 10132 [ERL 1790] S Gouli and W Reid (BS-2010-1). [Coleoptera: Chrysomelidae]. 2010. USA: Florida.

Tolypocladium cylindrosporum W Gams

[Sordariomycetes: Hypocreales]

Ophiocordycipitaceae

- 7456 GM Duke and MS Goettel (LRC 172). [Coleoptera: Elateridae]. 12 May 2003. Canada: Agassiz, British Columbia.

- 7812 [SRCAMB VL-389] V Likhovidov. Larva, [Coleoptera: Elateridae] Isolated from stroma. 8 Aug 2001. Russian Federation: Lazovsky Nature Reserve, Primorsky Krai. Field Collection Number F-268.

Tolypocladium inflatum W Gams

[Sordariomycetes: Hypocreales]

Ophiocordycipitaceae. Major synonym: *Tolypocladium niveum* (Rostrup) Bissett. Teleomorph: *Elaphocordyceps subsessilis* (Petch) GH Sung, JM Sung, Hywel-Jones & Spatafora

- 4877 KT Hodge (kth30A). [Coleoptera: Scarabaeidae: Aphodiinae]. 28 Sep 1994. USA: Michigan Hollow State Forest, Danby, New York. Single ascospore isolate from *Cordyceps subsessilis*. Specimen deposited at Cornell Plant Pathology Herbarium as CUP 63485.

- 4878 KT Hodge (kth30B). Larva, [Coleoptera: Scarabaeidae: Aphodiinae]. 28 Sep 1994. USA: Michigan Hollow State Forest, Danby, New York. Single ascospore isolate from *Cordyceps subsessilis*. Specimen deposited at Cornell Plant Pathology Herbarium as CUP 63485. .

- 4879 KT Hodge (kth30C). Larva, [Coleoptera: Scarabaeidae: Aphodiinae]. 28 Sep 1994. USA: Michigan Hollow State Forest, Danby, New York. Single ascospore isolate from *Cordyceps subsessilis*. Specimen

- 4898 KT Hodge (kth30V). Larva, [Coleoptera: Scarabaeidae: Aphodiinae]. 28 Sep 1994. USA: Michigan Hollow State Forest, Danby, New York. Single ascospore isolate from *Cordyceps subsessilis*. Specimen deposited at Cornell Plant Pathology Herbarium as CUP 63485.

***Verticillium* sp.**

[Sordariomycetes: Hypocreales]

These species are being reclassified to the appropriate genus and species as they are being re-examined after the phylogenetically based reclassification of *Verticillium* Section *Prostrata*.

- 6484 BL Parker (SPT-KZ-412). Adult, [Coleoptera: Dermestidae] overwintering in soil. 3 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.534' E 076°36.541'. **RESTRICTED ACCESS:**

contact Curator

- 6486 BL Parker (SPT-KR-415/2). Adult, [Coleoptera: Scarabaeidae] overwintering in soil. 11 Feb 2000. Kyrgyz Republic: GPS Coordinates N 43°40.597' E 075°02.855'. **RESTRICTED ACCESS:**

contact Curator

- 6501 BL Parker (SPT-KZ-458). Adult, [Coleoptera: Carabidae] overwintering in soil. 6 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.530' E 076°36.526'. **RESTRICTED ACCESS:**

*contact Curator****Verticillium insectorum* (Petch) W Gams**
[Sordariomycetes: Hypocreales]

- 3715 RA LeBrun ← J Hanula (C-1). Adult, *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Summer 1991. Location not specified.

***Verticillium lecanii* (Zimmerman) Viégas**

[Sordariomycetes: Hypocreales]

Cordycipitaceae. A species complex now reclassified in *Lecanicillium* and distributed among three species. Isolates remaining here are being transferred to the appropriate species as they are re-examined.

- 4022 T Steenberg (216) ← A Kirkeby-Thomse. *Agelastica alni* [Coleoptera: Chrysomelidae] on Alnus spp. Aug 1990. Denmark.

- 4047 T Steenberg (295). *Aphodius fimetarius* [Coleoptera: Scarabaeidae]. Mar 1992. Denmark: Copenhagen, Tåstrup, Zealand.

- 4048 T Steenberg (297). Larva, [Coleoptera: Cantharidae]. Mar 1992. Denmark: Copenhagen, Tåstrup, Zealand.

- 5849 T Steenberg (SSL 82). Larva, *Alphitobius diaperinus* [Coleoptera: Tenebrionidae]. Rec'd 26 Aug 1998. Originally isolated from *Myzus persicae* [Homoptera: Aphididae].

- 5856 T Steenberg (SSL 607). Adult, *Carcinops pumilio* [Coleoptera: Histeridae]. Feb 1997. Denmark: Broiler house, Kværns, Jutland.

- 6487 BL Parker (SPT-KZ-417). Adult, [Coleoptera: Tenebrionidae] overwintering in soil. 6 Feb 2000. Kazakhstan: GPS Coordinates N 43°08.530' E 076°36.526'. **RESTRICTED ACCESS:**

contact Curator

- 6545 D Chandler (HRI 33.79). *Otiorhynchus sulcatus* [Coleoptera: Curculionidae]. Rec'd 13 Jul 2000. United Kingdom.

***Zoophthora anglica* (Petch) Ben-Ze'ev & RG Kenneth**
[Entomophthoromycotina: Entomophthorales]
Entomophthoraceae

- 396 [ARSEF ?1377] S Keller (48). *Agriotes sputator* [Coleoptera: Elateridae]. 4 May 1977. Switzerland.

- 1739 N Wilding (85). *Trechus quadrifasciatus* [Coleoptera: Carabidae]. 5 Sep 1978. United Kingdom: Rothamsted Experimental Station, Hertfordshire, England.

- 2505 J Eilenberg (KVL 12). *Agriotes sputator* [Coleoptera: Elateridae]. 2 Jun 1986. Denmark: Brogaard, Fårevejle, Vestsjælland.

***Zoophthora phytonomi* (Arthur) Humber, Ben-Ze'ev & RG Kenneth in Humber & Ben-Ze'ev**
[Entomophthoromycotina: Entomophthorales]
Entomophthoraceae

- 113 [ARSEF 82 (lost); ATCC 34292; FPMI 951] RG Kenneth (3085) ← A Uziel. Larva, *Hypera variabilis* [Coleoptera: Curculionidae] on alfalfa. Apr 1976. Israel: Sedé Eliyahu.

- 191 RG Kenneth (3095) or (E.p. 2) ← I Ben-Ze'ev. Larva, *Hypera variabilis* [Coleoptera: Curculionidae]. Apr 1976. Israel: Sedé Eliyahu.

- 192 RG Kenneth (3133) ← I Ben-Ze'ev. Larva, *Hypera variabilis* [Coleoptera: Curculionidae] on alfalfa. 2 Mar 1977. Israel: Sedé Eliyahu.

- 202 [RG Kenneth 3178] AA Muka ← JP Kramer. *Hypera punctata* [Coleoptera: Curculionidae]. Jul 1977. USA: Ithaca, New York.

- 2188 RJ Dysart. Larva, *Hypera punctata* [Coleoptera: Curculionidae]. 29 Apr 1986. USA: Farmington, Delaware.

- 3342 S Roberts. *Hypera postica* [Coleoptera: Curculionidae]. Spring 1991. USA: Eddyville, Illinois.

- 3343 S Roberts. *Hypera postica* [Coleoptera: Curculionidae]. Spring 1991. USA: LaSalle County, Illinois.

- 3344 S Roberts. *Hypera postica* [Coleoptera: Curculionidae]. Spring 1991. USA: Albion, Illinois.

Unidentified / Hyphomycetes
Beauveria bassiana

Host by Fungus

Unidentified / Hyphomycetes

- [Coleoptera]
 - Unknown species 8641
 - [Coleoptera: Buprestidae]
 - Agrilus planipennis* 8155 8179 8183 8184
 - [Coleoptera: Coccinellidae]
 - Unknown species 5677
 - [Coleoptera: Curculionidae]
 - Unknown species 2225 5695
 - [Coleoptera: Scarabaeidae]
 - Popillia japonica* 5223 5224 5225 5226 5227
 - Rhizotrogus majalis* 2999

Unidentified sp.

- [Coleoptera]
 - Unknown species 1634
- [Coleoptera: Chrysomelidae]
 - Leptinotarsa decemlineata* 3724
 - Oulema melanopus* 3980
 - Phyllotreta nigripes* 4037
- [Coleoptera: Coccinellidae]
 - Hippodamia convergens* 3821
- [Coleoptera: Curculionidae]
 - Aracanthus* 3478
 - Sternechus subsignatus* 3471
- [Coleoptera: Scarabaeidae]
 - Aphodius tasmaniae* 4140
 - Popillia japonica* 3714 3719 3722 3841

Acremonium alternatum

- [Coleoptera: Scolytidae]
 - Hypothenemus hampei* 7282

Acremonium furcatum

- [Coleoptera: Curculionidae]
 - Hypera postica* 1372

Aphanocladium album

- [Coleoptera: Curculionidae]
 - Hypera postica* 1329

Aspergillus sp.

- [Coleoptera: Chrysomelidae]
 - Leptinotarsa decemlineata* 6571
- [Coleoptera: Curculionidae]
 - Anthonomus grandis* 7048

Aspergillus flavus

- [Coleoptera: Cerambycidae]
 - Anoplophora glabripennis* 6469
- [Coleoptera: Scarabaeidae]
 - Pachnoda interrupta* 6454
- [Coleoptera: Tenebrionidae]
 - Tenebrio molitor* 9381

Aspergillus nidulans(?)

- [Coleoptera: Curculionidae]
 - Diaprepes abbreviata* 6515

Aspergillus parasiticus

- [Coleoptera: Curculionidae]
 - Unknown species 2173

Batko sp.

- [Coleoptera: Cantharidae]
 - Unknown species 5810

Beauveria sp.

- [Coleoptera]
 - Unknown species 5697 5831 7595
- [Coleoptera: Buprestidae]
 - Agrilus planipennis* 8110 8111 8112 8113 8116 8117 8119 8120 8121 8122 8123 8124 8125 8126 8127 8128 8129 8130 8132 8133 8134 8135 8136 8137 8138 8139 8140 8141 8143 8144 8145 8146 8147 8148 8149 8150 8151 8152 8153 8154 8156 8158 8159 8160 8161 8164 8166 8167 8168 8169 8170 8171 8172 8173 8174 8175 8176 8177 8178 8180 8181 8182 8185 8186 8187 8188

[Coleoptera: Chrysomelidae]

- Basilepta fulvicornis* 8250
- Pachybrachis pallicornis* 547

[Coleoptera: Coccinellidae]

- Unknown species 4853 5678 5833 7591
- Coccinella septempunctata* 4027

[Coleoptera: Curculionidae]

- Unknown species 7463
- Anthonomus grandis* 1835
- Hypera postica* 1327
- Shirahoshizo insidiosus* 1681

[Coleoptera: Elateridae]

- Unknown species 7580
- [Coleoptera: Lampyridae]
 - Unknown species 5186

[Coleoptera: Scarabaeidae]

- Anomala cuprea* 1682
- Popillia japonica* 4390 4391 4392
- Xyloryctes jamaicensis* 2412

[Coleoptera: Scolytidae]

- Dendroctonus micans* 9272
- Tomicus pimperda* 4909 4910 4911 4912 4913 4914 4915 4916 4917 4918

[Coleoptera: Tenebrionidae]

- Tribolium castaneum* 5622

Beauveria amorpha

[Coleoptera: Cerambycidae]

- Psacothea hilaris* 1680

[Coleoptera: Curculionidae]

- Premnotrypes suturicallus* 1969

[Coleoptera: Scarabaeidae]

- Adoryphorus coulonii* 4149
- Anomala costata* 1676
- Popillia japonica* 4990

Beauveria amorpha(?)

[Coleoptera: Cerambycidae]

- Anoplophora glabripennis* 6827

Beauveria asiatica

[Coleoptera: Scarabaeidae]

- Holotrichia parallela* 4384 4474

Beauveria bassiana

[Coleoptera]

- Unknown species 293 301 350 754 1980
- 3197 3198 3199 4382 5668 5979
- 6559 6560 6692 6693 6695 6696
- 6697 7164 7470 7972 9444 10347

[Coleoptera: Anthicidae]

- Anthicus floralis* 157

[Coleoptera: Anthribidae]

- Araecerus fasciculatus* 413

[Coleoptera: Bruchidae]

- Caryedon serratus* 1186

[Coleoptera: Buprestidae]

- Unknown species 6499

- Agrilus planipennis* 8771 8772 8773 8774

[Coleoptera: Carabidae]

- Unknown species 952 1975 3386 6059
- 6099 6689 7241 7270 7581

- Amara familiaris* 4034

- Amara plebeja* 4031

- Bembidion lampros* 4032

[Coleoptera: Cerambycidae]

- Unknown species 318 319 785 2557
- 5072 6721 7251 7261 7266 7275
- 9442

- Anoplophora glabripennis* 6387 6390

- 6391 6393 7152 7153 7154 7155
- 7156 7157 7158 7159 7166 7167
- 7168 7169 7170 7171 7172 7173
- 7174 7175 7176 7177 7178 7179

- 8412 8413 8414

- Aromia moschata* 1559 1560 1561 1562 1563

- Dectes texanus* 6471

- Enaphalodes rufulus* 7404

- Moechotypa diphysis* 1678

- Monochamus alternatus* 1679

- Monochamus scutellatus* 7162 7163

- Ortholeptura valida* 5997

- Plectrodera scalarator* 7160 7161 7165

- Psacothea hilaris* 1041

[Coleoptera: Chrysomelidae]

- Unknown species 504 751 1971 7244
- 7247 7271 7272 8835 8836 10350

- Cerotoma* 951 1458 1467

- Cerotoma arcuata* 731 732 756 931 934 2075

- Crimissa* 786 788 805

- Crimissa cruralis* 4001

- Diabrotica* 721 946 947 948 949 950
- 956 982 2512 2938 2942 3219 3287

- Diabrotica balteata* 3309

- Diabrotica barberi* 2579

- Diabrotica paranaensis* 739 752 758

- 809 937 938

- Diabrotica speciosa* 928 958 1060 1453
- 1454 1455 1456 1459 1460 1461

- 1462 1463 1464 1465 1466 1469

- 1470 1471 1472 1473 1475 1476

- 1954 1961 2511 2515 2520 2625

- 2626 8373

- Diabrotica undecimpunctata* 201

- Diabrotica virgifera* 2330 3111

- Diabrotica virgifera virgifera* 9297

- 9298 9299 9300 9301 9302

Host by Fungus

Beauveria bassiana *Beauveria brongniartii*

<i>Galerucella</i> sp. 5465	<i>Listronotus oregonensis</i> 2983 2984	[Coleoptera: Scolytidae]
<i>Galerucina</i> 2463	2985 2986	Unknown species 1566 3040
<i>Leptinotarsa decemlineata</i> 149 252 317	<i>Metamasius</i> 842	<i>Dendroctonus ponderosae</i> 1849 1853
340 344 353 384 505 506 507 509	<i>Metamasius callizona</i> 5986	<i>Dryocoetes confusus</i> 1852 9184
510 534 535 1039 1079 1081 1106	<i>Metamasius hemipterus</i> 2642	<i>Hypothenemus hampei</i> 1480 2685 2686
1619 1620 1621 1622 1623 1624	<i>Oryzophagus oryzae</i> 3098	2687 2688 2689 2690 2691 2692
1704 1705 1706 1707 1708 1709	<i>Otiorrhynchus ligustici</i> 6884 6885	2693 3440 3443 3445 3448 3453
1710 1711 1712 1713 1721 1722	<i>Otiorrhynchus sulcatus</i> 813 814 815	3818 3819 5436 5437 5438 5439
1723 1749 1750 1775 1776 1777	1073 1074 1075 3065 6552 7763	5440 5441 5442 5443 5444 5445
1778 1779 1780 1781 1982 2030	8078	5446 5447 5448 5449 5450 5451
2031 2032 2695 2987 2988 2989	<i>Phlyctinus callosus</i> 8756 8757	5452 5453 5454 5455 5456 5457
2990 2991 5286 5533 5534 5535	<i>Premnotryes latithorax</i> 5983 5984	5458 5459 5460 5477 5478 5479
5536 5537 5807 5813 6986 6987	<i>Premnotrypes vorax</i> 2248	5480 5481 5482 5483 5484 5485
6988 8998 9441	<i>Rhynchites aequatus</i> 8037	5486 5487 5488 5489 5490 6526
<i>Lilioceris lilii</i> 5195	<i>Rhynchites baccus</i> 8668	6527 6528 6529 6530 6531 6532
<i>Macrolaspis monroisi</i> 2509	<i>Rhynchophorus ferrugineus</i> 6903	7758 10471
<i>Notonota</i> 3437 3438 3439 3441 3442	<i>Sitona</i> 1647 3063 8077	<i>Ips stenographus</i> 6900
3444 3446 3447 3450 3451 3452	<i>Sitona discoideus</i> 816 1153 1154 1155	<i>Ips typographus</i> 7525 7526
3455	1163 1164 1171 1172 1173 1174	<i>Tomicus minor</i> 5070 5071
<i>Odontota dorsalis</i> 5553	1175 1176 1177 1178 1179 1180	[Coleoptera: Staphylinidae]
<i>Paropsis charybdis</i> 3066	1181 1183 1185 1188 1189 1190	Unknown species 3112 4055
<i>Pyrrhalta luteola</i> 1509 1510 1511 1518	1191 1309 1311 1312 1313 1811	<i>Anotylus rugosus</i> 4051 4056
1519	1815 1816 1817 1818 1819 1820	<i>Anotylus</i> sp. 4046
<i>Pyrrhalta viburni</i> 9449	1821	<i>Gyrohypnus angustatus</i> 4054
<i>Systema</i> 2079	<i>Sitona humeralis</i> 1491	<i>Tachyporus</i> sp. 4028
<i>Xanthogaleruca luteola</i> 5501	<i>Sitona lineatus</i> 1156 1157 1158 1159	[Coleoptera: Tenebrionidae]
[Coleoptera: Chrysomelidae: Hispinae]	1160 1161 1162 1165 1167 1168	Unknown species 757 783 787 6057
Unknown species 8494	1169 1170 1182 1192 1193 1194	6064 6077 6078 6096 6113 6478
[Coleoptera: Coccinellidae]	1306 4013 4015 4016 4019 4021	6483
Unknown species 6055 6061 6062 6063	4041	<i>Alphitobius diaperinus</i> 5836 5838 5839
6074 6075 6092 6095 6111 6112	<i>Sitophilus</i> 7764 7773 7774	5840 5843 7941
<i>Coccinella</i> 2033 2034	<i>Sternechus subsignatus</i> 1450	<i>Pterohelaeus darlingensis</i> 8065
<i>Coccinella septempunctata</i> 2580 3534	[Coleoptera: Curculionidae: Apioninae]	<i>Tenebrio molitor</i> 5623 8038
4018	<i>Cylas formicarius elegantulus</i> 5981	
<i>Coleomegilla maculata</i> 1956	5982	Beauveria bassiana(?)
<i>Cycloneda sanguinea</i> 2010 8372 8462	[Coleoptera: Elateridae]	[Coleoptera: Chrysomelidae]
8463	Unknown species 150 784 804 5670	Unknown species 6890 6891
<i>Hippodamia convergens</i> 4973 4974	[Coleoptera: Lagriidae]	[Coleoptera: Scolytidae]
4975	<i>Lagria vilosa</i> 2961	<i>Dendroctonus micans</i> 9271
[Coleoptera: Cucujidae: Silvaninae]	[Coleoptera: Lampyridae]	
<i>Ahasverus advena</i> 5857	<i>Cratomorphus diaphanus</i> 8464	Beauveria brongniartii
[Coleoptera: Curculionidae]	[Coleoptera: Languriidae]	[Coleoptera]
Unknown species 930 1061 2040 3667	Unknown species 3457	Unknown species 2660
4052 6216 6217 7202 7466 7471	[Coleoptera: Nitidulidae]	[Coleoptera: Carabidae]
7769 7978 8520 8521 8522 8523	Unknown species 325	Unknown species 7268
8524 8525 8526 8530 8705	[Coleoptera: Pythidae]	[Coleoptera: Cerambycidae]
<i>Anthonomus grandis</i> 1966 2559 2638	<i>Pytho</i> 1854	<i>Anoplophora malasiaca</i> 6235 6412
2639 2945 2946 3097 7795	[Coleoptera: Rhizophagidae]	<i>Niphonoclea</i> 1431
<i>Anthonomus musculus</i> 3037	<i>Rhizophagus grandis</i> 1848	[Coleoptera: Curculionidae]
<i>Apion</i> 4023	[Coleoptera: Scarabaeidae]	Unknown species 6213 6214 6215
<i>Aracanthus</i> 753	Unknown species 5669 6058 6686 7264	<i>Cyrtepistomus castaneus</i> 2271
<i>Ceutorhynchus litura</i> 3403	<i>Adoryphorus coulonii</i> 4135 4136 4274	[Coleoptera: Elateridae]
<i>Chalcodermus</i> 941 942 943 953	4721	Unknown species 9452
<i>Chalcodermus aeneus</i> 336 337 733 734	<i>Ancognatha scarabaeoides</i> 2249 2250	[Coleoptera: Scarabaeidae]
735 736 738	<i>Anomala cuprea</i> 1683	Unknown species 4380 4381
<i>Conotrachelus nenuphar</i> 1016 8260	<i>Anoplognathus</i> 8763	<i>Anomala costata</i> 985
8261 8262 8263	<i>Aphodius tasmaniæ</i> 3070 8079	<i>Costelytra zealandica</i> 3054 7761
<i>Cosmopolites</i> 1833	<i>Costelytra zealandica</i> 3055	<i>Holotrichia parallela</i> 4385 4386 4388
<i>Cosmopolites sordidus</i> 1483 4798 4799	<i>Pachnoda interrupta</i> 6669 6676 6681	4465 4466 4467 4468 4469 4470
<i>Curculio caryae</i> 2676	<i>Phyllophaga</i> 5740 5741 5742 5743 5744	4471 4472 4473 4475 4476 4477
<i>Cyrtepistomus castaneus</i> 2270	5745	4478
<i>Diaprepes abbreviata</i> 412 416 433	<i>Popillia japonica</i> 3716 3717 5148 5150	<i>Melolontha</i> 5355 5356 5357 5358 5359
<i>Geraeus senilis</i> 3310 3311	<i>Rhopaea magnicornis</i> 4130 7813 8853	5360 5361 5362 5363 5364
<i>Heilipodus erythropus</i> 8461	8854	<i>Melolontha melolontha</i> 617 979 1067
<i>Hypera postica</i> 1389 1398 1399 1515	<i>Sericesthis nigrolineata</i> 7853	1068 1069 1070 1071 1072 1076
4038 4049		1077 7528

Beauveria brongniartii
Isaria fumosorosea

Host by Fungus

<i>Popillia japonica</i> 4389 4458 4992 4993 4994 4995 [Coleoptera: Scolytidae] <i>Ips typographus</i> 4024	<i>Cordyceps scarabaeicola</i> [Coleoptera: Chrysomelidae] Unknown species 7277 7278	<i>Isaria coleopterorum</i> [Coleoptera: Lampyridae] Unknown species 9509
Beauveria caledonica [Coleoptera] Unknown species 2251 [Coleoptera: Scarabaeidae] <i>Amphimallon solstitialis</i> 8024 [Coleoptera: Scolytidae] Unknown species 1567	Engyodontium rectidentatum [Coleoptera: Scarabaeidae] Unknown species 7805	Isaria farinosa [Coleoptera] Unknown species 2355 9516 [Coleoptera: Buprestidae] <i>Agrilus planipennis</i> 9944 9945 [Coleoptera: Carabidae] <i>Agonum dorsale</i> 4029 4044 <i>Bembidion lampros</i> 4043 <i>Hapalus sp.</i> 4045
Beauveria malawiensis [Coleoptera: Cerambycidae] <i>Phoracantha semipunctata</i> 7760	Erynia sp. [Coleoptera: Cantharidae] Unknown species 2664 5352 <i>Rhagonycha fulva</i> 2525 2536 2537 2538 2539 2553 2663	[Coleoptera: Cerambycidae] Unknown species 5073 5074 5075 5080 7276 <i>Anoplophora glabripennis</i> 8411
Beauveria pseudobassiana [Coleoptera: Scolytidae] <i>Ips</i> 1855 <i>Tomicus minor</i> 4933 [Coleoptera: Scolytidae (Tribe Ipini)] Unknown species 6229	Evlachovaea sp. [Coleoptera: Elateridae] <i>Agriotes</i> 7403 [Coleoptera: Scarabaeidae] <i>Phyllophaga menetriesi</i> 7551 [Coleoptera: Scolytidae] <i>Dendroctonus rufipennis</i> 1017	[Coleoptera: Chrysomelidae] Unknown species 6491 <i>Pyrrhalta luteola</i> 1507 1508
Beauveria sungii [Coleoptera: Chrysomelidae] Unknown species 7279 7280 [Coleoptera: Scarabaeidae] Unknown species 5689 <i>Lachnostenus morosa</i> 1685	Evlachovaea kintrischica [Coleoptera: Chrysomelidae] <i>Agelastica alni</i> 7218 8058	[Coleoptera: Coccinellidae] Unknown species 5754 5834 [Coleoptera: Curculionidae] <i>Otiorhynchus sulcatus</i> 2937 <i>Premnotrypes vorax</i> 799 <i>Sitona lineatus</i> 4039
Beauveria varroae [Coleoptera: Curculionidae] <i>Larinus</i> 2694	Fusarium sp. [Coleoptera: Buprestidae] <i>Agrilus planipennis</i> 8131 [Coleoptera: Chrysomelidae] <i>Lilioceris lilii</i> 4011 [Coleoptera: Curculionidae] <i>Anthonomus musculus</i> 3030 3031 3032 <i>Chalcodermus aeneus</i> 2568 2569 <i>Conotrachelus nenuphar</i> 8266 8267 <i>Otiorhynchus ligustici</i> 4825 <i>Sitona discoideus</i> 1310 [Coleoptera: Scolytidae] <i>Dendroctonus micans</i> 9273 9274 <i>Hypothenemus hampei</i> 5461 5875 5878 5879 6602 7063	[Coleoptera: Lagriidae] <i>Lagria vilosa</i> 1957 [Coleoptera: Scarabaeidae] Unknown species 6488 6489
Cladosporium sphaerospermum [Coleoptera: Curculionidae] <i>Diaprepes abbreviata</i> 6516	Harposporium janus [Coleoptera: Cerambycidae] Unknown species 5601	[Coleoptera: Staphylinidae] <i>Staphylinus olens</i> 4040
Clonostachys rosea [Coleoptera: Scarabaeidae] Unknown species 9491	Hirsutella fusiformis [Coleoptera: Curculionidae] <i>Brachyderes incanus</i> 5474	[Coleoptera: Tenebrionidae] Unknown species 5699 <i>Alphitobius diaperinus</i> 5858 <i>Tenebrio molitor</i> 8917
Conidiobolus sp. [Coleoptera: Curculionidae] <i>Hypera variabilis</i> 80 81	Isaria sp. [Coleoptera] Unknown species 9519	Isaria fumosorosea [Coleoptera] Unknown species 5694 7716 9602
Conidiobolus coronatus [Coleoptera: Curculionidae] <i>Ceutorhynchus napi</i> 1572 1573 1574 1575	Isaria amoenerosea [Coleoptera: Lagriidae] <i>Lagria vilosa</i> 741 744 2220 2958 2959 2960 4097 [Coleoptera: Meloidae] Unknown species 4849	[Coleoptera: Buprestidae] <i>Agrilus planipennis</i> 8142
Conidiobolus osmodes [Coleoptera: Curculionidae] <i>Hypera variabilis</i> 79	Isaria catenianulata [Coleoptera: Curculionidae] Unknown species 6241 <i>Brachyderes incanus</i> 6243	[Coleoptera: Chrysomelidae] Unknown species 8840 <i>Pyrrhalta luteola</i> 1506 <i>Spaethiella</i> 2956
Cordyceps sp. [Coleoptera: Curculionidae] <i>Sitophilus oryzae</i> 4852 [Coleoptera: Scarabaeidae] Unknown species 7848 <i>Popillia japonica</i> 3718	Isaria catenobliqua [Coleoptera] Unknown species 6244	[Coleoptera: Coccinellidae] <i>Coccinella septempunctata</i> 9521 [Coleoptera: Lagriidae] <i>Lagria vilosa</i> 722 2216 2217 2219 2221
Cordyceps brongniartii [Coleoptera: Scarabaeidae] <i>Anomala cuprea</i> 7516 7517		[Coleoptera: Scarabaeidae] <i>Popillia japonica</i> 2679 <i>Rhopaea magnicornis</i> 8892 [Coleoptera: Scolytidae] <i>Hypothenemus hampei</i> 6730 7284 [Coleoptera: Tenebrionidae] <i>Alphitobius diaperinus</i> 5844 5845 5846 5847 <i>Tenebrio molitor</i> 5627

Host by Fungus

Isaria javanica

Metarhizium anisopliae sensu stricto

Isaria javanica

- [Coleoptera]
 - Unknown species 7119
 - [Coleoptera: Curculionidae]
 - Litodactylus leucogaster* 322

Lecanicillium sp.

- [Coleoptera: Silphidae]
 - Unknown species 9459

Lecanicillium fungicola

- [Coleoptera: Elateridae]
 - Unknown species 9483

Lecanicillium lecanii

- [Coleoptera: Buprestidae]
 - Agrilus planipennis* 8115
- [Coleoptera: Cerambycidae]
 - Plectrodera scalator* 7181 7182
- [Coleoptera: Chrysomelidae]
 - Pyrrhalta luteola* 1505

Lecanicillium longisporum

- [Coleoptera: Staphylinidae]
 - Tachyporus hypnorum* 4050

Lecanicillium muscarium

- [Coleoptera: Buprestidae]
 - Agrilus planipennis* 8114 8118 8157
8163 8165
- [Coleoptera: Curculionidae]
 - Unknown species 7248
 - Hypera postica* 1328 1401 1402 1403
 - Pissodes strobi* 8048 8049 8050 8051
8052 8053 8054
 - Sitona lineatus* 4033
- [Coleoptera: Melyridae]
 - Malachius bipustulatus* 1335
- [Coleoptera: Scolytidae]
 - Dendroctonus micans* 4036 9267 9268
- [Coleoptera: Tenebrionidae]
 - Tenebrio molitor* 8923

Lecanicillium muscarium(?)

- [Coleoptera: Buprestidae]
 - Agrilus planipennis* 8162
- [Coleoptera: Curculionidae]
 - Conotrachelus nenuphar* 8265

Lecanicillium nr. aranearum

- [Coleoptera: Lampyridae]
 - Unknown species 9460

Lecanicillium pissodis

- [Coleoptera: Curculionidae]
 - Pissodes strobi* 8055 8056 8057

Lecanicillium sp. 2(?)

- [Coleoptera]
 - Unknown species 2832

Metarhizium sp.

- [Coleoptera: Scarabaeidae]
 - Dermolepida albohirtum* 7493
 - Rhopaea magnicornis* 7495 8851 8852
8855 8856 8857

Metarhizium anisopliae sensu lato

- [Coleoptera]
 - Unknown species 4290 4333 4334 4335
4336 4337 4338 4339 4340 4341
4557 4558 4572 4582
 - Haphochelus marginalis* 3148
- [Coleoptera: Bruchidae]
 - Unknown species 932 954
- [Coleoptera: Carabidae]
 - Unknown species 939 1901
- [Coleoptera: Cerambycidae]
 - Agrianome spinicollis* 7498 7499 7500
 - Anoplophora glabripennis* 6388 6389
7180
- [Coleoptera: Chrysomelidae]
 - Brontispa longissima* 8745 8746 8747
 - Cerotoma arcuata* 760 2076 2077 2635
2941
 - Diabrotica* 1885 2513
 - Diabrotica speciosa* 1056 1958
- [Coleoptera: Coccinellidae]
 - Coleomegilla maculata* 808
- [Coleoptera: Curculionidae]
 - Unknown species 8098 8099
 - Blosyrus asellus* 9217 9218
 - Chalcodermus aeneus* 725 929
 - Desiantha diversipes* 8568 8569
 - Geraeus senilis* 3305 3306 3308
 - Listronotus maculicollis* 9374
 - Otiorhynchus ligustici* 4819 4820 4821
4822 4823 4824
 - Otiorhynchus sulcatus* 818 6549
 - Rhabdoscelus obscurus* 8762 8828 8847
 - Sternechus subsignatus* 1989
- [Coleoptera: Elateridae]
 - Unknown species 8543 8544 8545 8546
8547 8548
 - Agriotes* 6551 7494 7524
 - Agriotes sputator* 1377
 - Conoderus* 1903
 - Limonius canus* 7000 7001 7002 7003
7004 7005 7006 7007 7008 7009
- [Coleoptera: Scarabaeidae]
 - Unknown species 2163 3479 7527 7529
 - Adoryphorus coulonii* 4137 4138 4141
4142 4239 4346 4677 4716 4722
7815
 - Amphimallon majale* 9373
 - Anomola* 8738 8739 8740 8741 8742
8743
 - Anoplognathus* 8764
 - Anoplognathus hirsutus* 4574 4779
 - Antitrogus consanguineus* 8761
 - Antitrogus mussoni* 7842 7865 7931
 - Antitrogus parvulus* 7496 7819 7839
7854 7864 8832 8833 8834 8893
 - Aphodius tasmaniæ* 4125 4132 4133
4139 7845
 - Costelytra zealandica* 3056 3057
 - Cyclocephala* 8837 8838
 - Dasygnathus dejeani* 8839
 - Dermolepida albohirtum* 7452 7492
8744 8754 8755 10469
 - Heteronychus arator* 7932 7933 7934
7935 7936 8549 8550 8551 8552
- [Coleoptera: Chrysomelidae]
 - Brontispa longissima* 2223
- [Coleoptera: Curculionidae]
 - Otiorhynchus sulcatus* 6546

Metarhizium anisopliae sensu stricto

- [Coleoptera: Chrysomelidae]

Brontispa longissima 2223

- [Coleoptera: Curculionidae]

Otiorhynchus sulcatus 6546

Metarhizium anisopliae* sensu stricto**Purpureocillium lilacinum*****Host by Fungus**

[Coleoptera: Elateridae] <i>Conoderus</i> 2518	Metarhizium majus [Coleoptera: Scarabaeidae] Unknown species 1858 1859 <i>Anoplognathus</i> 4566 4601 7505 <i>Oryctes</i> 1914 <i>Oryctes rhinoceros</i> 978 1946	Paecilomyces sp. [Coleoptera: Curculionidae] Unknown species 5184 5193
[Coleoptera: Scarabaeidae] <i>Heteronyx piceus</i> 7450 <i>Holotrichia consanguinea</i> 10475 <i>Holotrichia serra</i> 10472 10476 <i>Phyllophaga cuyabana</i> 3924	Metarhizium pingshaense [Coleoptera] Unknown species 3210 4342 4610 [Coleoptera: Cerambycidae] <i>Anoplophora glabripennis</i> 8420 [Coleoptera: Chrysomelidae] <i>Zygogramma bicolorata</i> 2231 [Coleoptera: Curculionidae] <i>Diaprepes abbreviata</i> 5197 [Coleoptera: Scarabaeidae] Unknown species 2162 <i>Antitrogus mussoni</i> 7417 <i>Antitrogus parvulus</i> 7410 <i>Costelytra zealandica</i> 7435 <i>Oryctes rhinoceros</i> 538 <i>Scapanes australis</i> 3604	Paecilomyces canadensis [Coleoptera: Scarabaeidae] <i>Heptophylla picea</i> 984
Metarhizium anisopliae var. lepidotae [Coleoptera: Scarabaeidae] <i>Dermolepida albohirtum</i> 7453 <i>Lepidiota consobrina</i> 8732	Pandora blunckii [Coleoptera: Elateridae] <i>Athalia rosae</i> 915 917 920 1715 1716 1717 1718	Paraisaria dubia [Coleoptera: Scarabaeidae: Melolonthinae] <i>Antitrogus rugulosus</i> 5764
Metarhizium anisopliae var. majus [Coleoptera: Scarabaeidae] <i>Oryctes rhinoceros</i> 2151 3145 <i>Xyloryctes jamaicensis</i> 297 298	Penicillium sp. [Coleoptera: Curculionidae] <i>Anthonomus musculus</i> 3036 <i>Chalcodermus bimaculatus</i> 2950	Pochonia bulbillosa(?) [Coleoptera: Curculionidae] <i>Anthonomus musculus</i> 3035
Metarhizium brunneum [Coleoptera: Cerambycidae] <i>Anoplophora glabripennis</i> 6392 7234 8415 8416 8417 8418 8419 [Coleoptera: Curculionidae] Unknown species 2210 2224 <i>Otiorhynchus sulcatus</i> 817 820 4228 5198 <i>Sitona lineatus</i> 4020 [Coleoptera: Elateridae] <i>Agriotes</i> 2107 [Coleoptera: Scarabaeidae] Unknown species 472 <i>Aphodius tasmaniæ</i> 346 4131 <i>Diloboderus abderus</i> 6120 <i>Melolontha melolontha</i> 1066 <i>Phyllopertha horticola</i> 6477 <i>Popillia japonica</i> 3864 [Coleoptera: Tenebrionidae] <i>Tenebrio molitor</i> 5626 <i>Tribolium castaneum</i> 5625	Metarhizium robertsii [Coleoptera: Carabidae] Unknown species 2469 [Coleoptera: Cerambycidae] <i>Decetes texanus</i> 6472 [Coleoptera: Chrysomelidae] <i>Cerotoma arcuata</i> 724 <i>Diabrotica</i> 2514 [Coleoptera: Curculionidae] <i>Curculio caryae</i> 2575 3608 <i>Listronotus oregonensis</i> 2981 <i>Otiorhynchus sulcatus</i> 1910 [Coleoptera: Elateridae] <i>Conoderus</i> 23 1897 [Coleoptera: Scarabaeidae] <i>Ancognatha scarabaeoides</i> 797 <i>Heteronychus arator</i> 7424 <i>Heteronyx</i> 7449 <i>Phyllophaga ?anxia</i> 2134 <i>Popillia japonica</i> 1046 1298 1878 3721 5149 <i>Rhizotrogus majalis</i> 2547 3108 3211 4123 <i>Strigoderma arboricola</i> 1968 [Coleoptera: Tenebrionidae] <i>Tribolium castaneum</i> 3388	Pochonia chlamydosporia [Coleoptera: Scarabaeidae] Unknown species 3314
Metarhizium flavoviride [Coleoptera: Curculionidae] <i>Otiorhynchus sulcatus</i> 2024 [Coleoptera: Scarabaeidae] <i>Lachnostenra bidentata</i> 8737	Mixed Culture sp. [Coleoptera: Chrysomelidae] <i>Pyrrhalta fuscipennis</i> 1043 [Coleoptera: Lampyridae] Unknown species 5188 [Coleoptera: Scarabaeidae] <i>Holotrichia parallela</i> 4387	Pochonia chlamydosporia var. chlamydosporia [Coleoptera: Lagriidae] <i>Lagria vilosa</i> 2218
Metarhizium flavoviride var. flavoviride [Coleoptera: Curculionidae] <i>Otiorhynchus sulcatus</i> 1184 [Coleoptera: Scarabaeidae] <i>Adoryphorus coulonii</i> 4719 4720	Mucor circinelloides [Coleoptera: Cerambycidae] <i>Anoplophora glabripennis</i> 6470	Polycephalomyces sp. [Coleoptera] Unknown species 9496 [Coleoptera: Carabidae] Unknown species 9497
Metarhizium frigidum [Coleoptera: Scarabaeidae] <i>Adoryphorus</i> 4124	Ophiocordyceps aphodii [Coleoptera: Scarabaeidae] <i>Aphodius howitti</i> 5498	Polycephalomyces formosus [Coleoptera: Carabidae] <i>Calosoma</i> 1424
Metarhizium guizhouense [Coleoptera: Curculionidae] <i>Myllocerus discolor</i> 3603 <i>Sitona discoideus</i> 819 [Coleoptera: Scarabaeidae] Unknown species 683 <i>Melolontha melolontha</i> 977 <i>Papuana woodlarkiana</i> 4604		Purpureocillium lilacinum [Coleoptera: Chrysomelidae] <i>Cerotoma</i> 1951 [Coleoptera: Curculionidae] <i>Diaprepes abbreviata</i> 410 [Coleoptera: Elateridae] Unknown species 9524 [Coleoptera: Lagriidae] <i>Lagria vilosa</i> 723 2952 [Coleoptera: Scarabaeidae] Unknown species 6110 <i>Popillia japonica</i> 9371 [Coleoptera: Scolytidae] <i>Hypothenemus hampei</i> 5876 5877 5880 5882 6188 6190
Metarhizium lepidiotae [Coleoptera: Scarabaeidae] <i>Dermolepida albohirtum</i> 7488 <i>Lepidiota consobrina</i> 7412		[Coleoptera: Tenebrionidae] <i>Tenebrio molitor</i> 8918 8919 8920 8921 8922

Host by Fungus

Scopulariopsis sp.

- [Coleoptera: Cerambycidae]
Anoplophora glabripennis 8421
[Coleoptera: Chrysomelidae]
Leptinotarsa decemlineata 2327
[Coleoptera: Curculionidae]
Unknown species 2169

Simplicillium lamellicola

- [Coleoptera: Carabidae]
Carabus 9479

Sorosporella uvella

- [Coleoptera: Curculionidae]
Curculio caryae 1123

Sporothrix insectorum

- [Coleoptera: Carabidae]
Carabus 9502

Sterile mycelium

- [Coleoptera: Cerambycidae]
Unknown species 4009
[Coleoptera: Scarabaeidae]
Adoryphorus coulonii 4243

Stilbella buquetii

- [Coleoptera: Curculionidae]
Artipes 2915

Synnematium jonesii

- [Coleoptera: Hispinae]
Promecotheca papuana 5664

Tilachlidium sp.

- [Coleoptera: Chrysomelidae]
Unknown species 10132
[Coleoptera: Elateridae]
Unknown species 2415

Tolypocladium cylindrosporum

- [Coleoptera: Elateridae]
Unknown species 7456 7812

Tolypocladium inflatum

- [Coleoptera: Scarabaeidae: Aphodiinae]
Unknown species 4877 4878 4879 4880
4881 4882 4883 4884 4885 4886
4887 4888 4889 4890 4891 4892
4893 4894 4895 4896 4897 4898

Verticillium sp.

- [Coleoptera: Carabidae]
Unknown species 6501
[Coleoptera: Dermestidae]
Unknown species 6484
[Coleoptera: Scarabaeidae]
Unknown species 6486

Verticillium insectorum

- [Coleoptera: Curculionidae]
Otiorhynchus sulcatus 3715

Verticillium lecanii

- [Coleoptera: Cantharidae]
Unknown species 4048
[Coleoptera: Chrysomelidae]
Agelastica alni 4022
[Coleoptera: Curculionidae]
Otiorhynchus sulcatus 6545
[Coleoptera: Histeridae]
Carcinops pumilio 5856
[Coleoptera: Scarabaeidae]
Aphodius fimetarius 4047
[Coleoptera: Tenebrionidae]
Unknown species 6487
Alphitobius diaperinus 5849

Zoophthora anglica

- [Coleoptera: Carabidae]
Trechus quadrifasciatus 1739
[Coleoptera: Elateridae]
Agriotes sputator 396 2505

Zoophthora phytonomi

- [Coleoptera: Curculionidae]
Hypera postica 3342 3343 3344
Hypera punctata 202 2188
Hypera variabilis 113 191 192

Coleoptera**Coleoptera: Cerambycidae****Animalia****Arthropoda • Insecta****Coleoptera**

- Argentina
 - Beauveria bassiana* 7470
- Belarus
 - Isaria* sp. 9519
- Brazil, Goiás
 - Beauveria bassiana* 754
- Brazil, Pará
 - Beauveria caledonica* 2251
- Canada, British Columbia
 - Beauveria bassiana* 7972
- Ethiopia
 - Beauveria bassiana* 6692 6693 6695
6696 6697
- France
 - Beauveria bassiana* 1980
 - Unidentified sp. 1634
- Ghana
 - Unidentified / Hyphomycetes 8641
- India
 - Beauveria brongniartii* 2660
 - Metarhizium pingshaense* 3210
- Location not specified
 - Beauveria bassiana* 293 4382
- Mexico
 - Lecanicillium* sp. 2(?) 2832
- Philippines
 - Beauveria bassiana* 3197 3198 3199
 - Isaria farinosa* 2355
- Poland
 - Beauveria bassiana* 301
- PR China
 - Beauveria bassiana* 7164
 - Isaria catenobliqua* 6244
 - Isaria fumosorosea* 9602
- Republic of Korea
 - Beauveria* sp. 5697
 - Isaria fumosorosea* 5694
- Russian Federation
 - Beauveria bassiana* 9444
 - Isaria fumosorosea* 7716
 - Polycephalomyces* sp. 9496
- Turkey
 - Beauveria bassiana* 5668 10347
 - Beauveria* sp. 5831
- Ukraine
 - Beauveria* sp. 7595
 - Isaria farinosa* 9516
- United Kingdom
 - Beauveria bassiana* 6559 6560
- USA, Florida
 - Beauveria bassiana* 5979
- USA, New York
 - Beauveria bassiana* 350
- USA, Texas
 - Isaria javanica* 7119
- Solomon Islands
 - Metarhizium anisopliae* sensu lato
4290 4333 4334 4335 4336 4337

Fungus by Host and Location

- 4338 4339 4340 4341 4557 4558
4572 4582
- Metarhizium pingshaense* 4342
4610
- Haphochelus marginalis*
France
Metarhizium anisopliae sensu lato
3148
- Coleoptera: Anthicidae**
Anthicus floralis
Poland
Beauveria bassiana 157
- Coleoptera: Anthribidae**
Araecerus fasciculatus
USA, Florida
Beauveria bassiana 413
- Coleoptera: Bruchidae**
Brazil, Goiás
Metarhizium anisopliae sensu lato
932
- Brazil, Mato Grosso
Metarhizium anisopliae sensu lato
954
- Caryedon serratus*
France
Beauveria bassiana 1186
- Coleoptera: Buprestidae**
Kyrgyz Republic
Beauveria bassiana 6499
- Agrilus planipennis*
USA, Michigan
Beauveria bassiana 8771 8772 8773
8774
- Beauveria* sp. 8110 8111 8112 8113
8116 8117 8119 8120 8121 8122
8123 8124 8125 8126 8127 8128
8129 8130 8132 8133 8134 8135
8136 8137 8138 8139 8140 8141
8143 8144 8145 8146 8147 8148
8149 8150 8151 8152 8153 8154
8156 8158 8159 8160 8161 8164
8166 8167 8168 8169 8170 8171
8172 8173 8174 8175 8176 8177
8178 8180 8181 8182 8185 8186
8187 8188 8131
- Isaria farinosa* 9944 9945
- Isaria fumosorosea* 8142
- Lecanicillium lecanii* 8115
- Lecanicillium muscarium* 8114 8118
8157 8163 8165
- Lecanicillium muscarium*(?) 8162
- Unidentified / Hyphomycetes 8155
8179 8183 8184
- Coleoptera: Cantharidae**
Denmark
Batkoia sp. 5810 2664
Verticillium lecanii 4048
- USA, New York
Erynia sp. 5352
- Rhagonycha fulva*
Denmark
Erynia sp. 2525 2536 2537 2538
2539 2553 2663
- Coleoptera: Carabidae**
Belarus
Polycephalomyces sp. 9497
- Brazil, Goiás
Metarhizium anisopliae sensu lato
939
- Brazil, Mato Grosso
Beauveria bassiana 952
- Brazil, Pará
Metarhizium anisopliae sensu lato
1901
- Ethiopia
Beauveria bassiana 6689
- France
Beauveria bassiana 1975
- Kazakhstan
Verticillium sp. 6501
- Mexico
Metarhizium robertsii 2469
- Republic of Korea
Beauveria bassiana 7241 7270
Beauveria brongniartii 7268
- Russian Federation
Beauveria bassiana 7581
- USA, Washington
Beauveria bassiana 3386
- Uzbekistan
Beauveria bassiana 6059 6099
- Agonum dorsale*
Denmark
Isaria farinosa 4029 4044
- Amara familiaris*
Denmark
Beauveria bassiana 4034
- Amara plebeja*
Denmark
Beauveria bassiana 4031
- Bembidion lampros*
Denmark
Beauveria bassiana 4032
Isaria farinosa 4043
- Calosoma* sp.
Poland
Polycephalomyces formosus 1424
- Carabus* sp.
Russian Federation
Sporothrix insectorum 9502
- Ukraine
Simplicillium lamellicola 9479
- Hapalus* sp.
Denmark
Isaria farinosa 4045
- Trechus quadristriatus*
United Kingdom
Zoophthora anglica 1739
- Coleoptera: Cerambycidae**
Brazil, Ceará
Beauveria bassiana 785
- Denmark
Sterile mycelium 4009
- Ecuador
Beauveria bassiana 2557
- France
Beauveria bassiana 5072
Isaria farinosa 5073 5074 5075 5080

Fungus by Host and Location

Coleoptera: Cerambycidae
Coleoptera: Chrysomelidae

Japan	<i>Monochamus scutellatus</i>	Brazil, Santa Catarina
	<i>Harposporium janus</i> 5601	<i>Beauveria bassiana</i> 1467
Mexico	<i>Beauveria bassiana</i> 319	<i>Cerotoma arcuata</i>
		Brazil, Amazonas
Republic of Korea	<i>Niphonoclea</i> sp.	<i>Beauveria bassiana</i> 731 732 756
	Philippines	Brazil, Bahia
	<i>Beauveria brongniartii</i> 1431	<i>Beauveria bassiana</i> 2075
	<i>Ortholeptura valida</i>	Brazil, Goiás
	USA, Oregon	<i>Beauveria bassiana</i> 931 934
	<i>Beauveria bassiana</i> 5997	<i>Metarhizium anisopliae</i> sensu lato
Russian Federation	<i>Phoracantha semipunctata</i>	760 2076 2077 2635 2941
	Malawi	<i>Metarhizium robertsii</i> 724
	<i>Beauveria malawiensis</i> 7760	
	<i>Plectrodera scalarator</i>	<i>Crimissa</i> sp.
	USA, Michigan	Brazil, Ceará
	<i>Beauveria bassiana</i> 7160 7161 7165	<i>Beauveria bassiana</i> 786 788 805
	<i>Lecanicillium lecanii</i> 7181 7182	<i>Crimissa cruralis</i>
	<i>Psacothaea hilaris</i>	Brazil, Ceará
	Japan	<i>Beauveria bassiana</i> 4001
	<i>Beauveria amorphula</i> 1680	<i>Diabrotica</i> sp.
	<i>Beauveria bassiana</i> 1041	Brazil
		<i>Beauveria bassiana</i> 3219
	Coleoptera: Chrysomelidae	Brazil, Amazonas
Australia		<i>Beauveria bassiana</i> 2512
	<i>Beauveria bassiana</i> 8835 8836	Brazil, Goiás
	<i>Isaria fumosorosea</i> 8840	<i>Beauveria bassiana</i> 956 2938 2942
		<i>Metarhizium anisopliae</i> sensu lato
	Brazil, Australia	1885 2513
	<i>Beauveria bassiana</i> 1971	<i>Metarhizium robertsii</i> 2514
		Brazil, Mato Grosso
Kazakhstan	<i>Isaria farinosa</i> 6491	<i>Beauveria bassiana</i> 946 947 948 949
		950 982
	Mexico	Colombia
	<i>Beauveria bassiana</i> (?) 6890 6891	<i>Beauveria bassiana</i> 721
		Mexico
Nepal	<i>Cordyceps scarabaeicola</i> 7277 7278	<i>Beauveria bassiana</i> 3287
		<i>Diabrotica balteata</i>
	Republic of Kazakhstan	Mexico
	<i>Beauveria bassiana</i> 10350	<i>Beauveria bassiana</i> 3309
		<i>Diabrotica barberi</i>
	Republic of Korea	USA, South Dakota
	<i>Beauveria bassiana</i> 7244 7247 7271	<i>Beauveria bassiana</i> 2579
	7272	<i>Diabrotica paranaensis</i>
	<i>Beauveria sungii</i> 7279 7280	Brazil, Goiás
		<i>Beauveria bassiana</i> 739 752 758 809
USA, Florida	<i>Tilachlidium</i> sp. 10132	Brazil, Mato Grosso
		<i>Beauveria bassiana</i> 937 938
Vietnam	<i>Beauveria bassiana</i> 751	<i>Diabrotica speciosa</i>
		Argentina
Yugoslavia, Serbia	<i>Evlachovaea kintrischica</i> 7218 8058	<i>Beauveria bassiana</i> 2515 8373
	<i>Beauveria bassiana</i> 504	Brazil, Alagoas
		<i>Beauveria bassiana</i> 1954
<i>Agelastica alni</i>		Brazil, Bahia
Denmark	<i>Verticillium lecanii</i> 4022	<i>Beauveria bassiana</i> 1961
		<i>Metarhizium anisopliae</i> sensu lato
Republic of Georgia	<i>Evlachovaea kintrischica</i> 7218 8058	1958
		Brazil, Goiás
		<i>Beauveria bassiana</i> 928 1476 2625
<i>Basilepta fulvicornis</i>		2626
India	<i>Beauveria</i> sp. 8250	Brazil, Paraná
		<i>Beauveria bassiana</i> 958 1060 1453
	<i>Brontispa longissima</i>	1454 1455 1461 1462 1463 1466
Australia		1469 2511 2520
	<i>Metarhizium anisopliae</i> sensu	<i>Metarhizium anisopliae</i> sensu lato
	8745 8746 8747	1056
Western Samoa	<i>Metarhizium anisopliae</i> sensu	
	stricto 2223	
<i>Cerotoma</i> sp.		
Brazil, Mato Grosso		
	<i>Beauveria bassiana</i> 951	
Brazil, Paraná		
	<i>Beauveria bassiana</i> 1458	
Brazil, Rio de Janeiro		
	<i>Purpureocillium lilacinum</i> 1951	

Coleoptera: Chrysomelidae
Coleoptera: Curculionidae

Fungus by Host and Location

Brazil, Rio Grande do Sul <i>Beauveria bassiana</i> 1456 1459 1460 1464 1465 1475	Yugoslavia, Croatia <i>Beauveria bassiana</i> 509	Uzbekistan <i>Beauveria bassiana</i> 6055 6061 6062 6063 6074 6075 6092 6095 6111 6112
Brazil, Santa Catarina <i>Beauveria bassiana</i> 1470 1471 1472 1473	<i>Lilioceris lili</i> <i>Beauveria bassiana</i> 5195	<i>Coccinella</i> sp. USA, New York <i>Beauveria bassiana</i> 2033 2034
<i>Diabrotica undecimpunctata</i> USA, Oregon <i>Beauveria bassiana</i> 201	Denmark <i>Fusarium</i> sp. 4011	<i>Coccinella septempunctata</i> Denmark <i>Beauveria bassiana</i> 4018 <i>Beauveria</i> sp. 4027
<i>Diabrotica virgifera</i> Mexico <i>Beauveria bassiana</i> 2330	<i>Maecolaspis monrosi</i> Argentina <i>Beauveria bassiana</i> 2509	Location not specified <i>Beauveria bassiana</i> 3534
<i>Diabrotica virgifera</i> Mexico <i>Beauveria bassiana</i> 3111	<i>Notonota</i> sp. Costa Rica <i>Beauveria bassiana</i> 3437 3438 3439 3441 3442 3444 3446 3447 3450 3451 3452 3455	Ukraine <i>Isaria fumosorosea</i> 9521
<i>Diabrotica virgifera virgifera</i> Mexico <i>Beauveria bassiana</i> 9297 9298 9299 9300 9301 9302	<i>Odontota dorsalis</i> <i>Beauveria bassiana</i> 5553	USA, Michigan <i>Beauveria bassiana</i> 2580
<i>Galerucella</i> sp. USA, Texas <i>Beauveria bassiana</i> 5465	<i>Oulema melanopus</i> France <i>Unidentified</i> sp. 3980	<i>Coleomegilla maculata</i> Brazil, Alagoas <i>Beauveria bassiana</i> 1956
<i>Galerucina</i> sp. France <i>Beauveria bassiana</i> 2463	<i>Pachybrachis pallicornis</i> Malaysia <i>Beauveria</i> sp. 547	Brazil, Goiás <i>Metarhizium anisopliae</i> sensu lato 808
<i>Leptinotarsa decemlineata</i> Canada, Ontario <i>Beauveria bassiana</i> 5807	<i>Paropsis charybdis</i> New Zealand <i>Beauveria bassiana</i> 3066	<i>Cycloneda sanguinea</i> Argentina <i>Beauveria bassiana</i> 2010 8372 8462 8463
Canada, Québec <i>Beauveria bassiana</i> 2987 2988 2989 2990 2991	<i>Phyllotreta nigripes</i> Denmark <i>Unidentified</i> sp. 4037	<i>Hippodamia convergens</i> Mexico <i>Unidentified</i> sp. 3821
Commonwealth of Independent States <i>Beauveria bassiana</i> 2695	<i>Pyrrhalta fuscipennis</i> Japan <i>Mixed Culture</i> sp. 1043	USA, New York <i>Beauveria bassiana</i> 4973 4974 4975
France <i>Beauveria bassiana</i> 149 384 1982	<i>Pyrrhalta luteola</i> France <i>Beauveria bassiana</i> 1509 1510 1511 1518 1519	Coleoptera: Cucujidae: Silvaninae <i>Ahasverus advena</i> Denmark <i>Beauveria bassiana</i> 5857
Germany <i>Beauveria bassiana</i> 340	<i>Isaria farinosa</i> 1507 1508	Coleoptera: Curculionidae <i>Metarhizium anisopliae</i> sensu lato 8098 8099
Italy <i>Beauveria bassiana</i> 1106	<i>Isaria fumosorosea</i> 1506	Argentina <i>Beauveria bassiana</i> 7202 7466 7471 8520 8521 8522 8523 8524 8525 8526 8530
Location not specified <i>Beauveria bassiana</i> 5286	<i>Lecanicillium lecanii</i> 1505	<i>Beauveria</i> sp. 7463
Russian Federation <i>Beauveria bassiana</i> 9441	<i>Pyrrhalta viburni</i> Russian Federation <i>Beauveria bassiana</i> 9449	Brazil, Goiás <i>Beauveria bassiana</i> 930
USA, Maine <i>Beauveria bassiana</i> 252 353	<i>Spaethiella</i> sp. Brazil, Amazonas <i>Isaria fumosorosea</i> 2956	Brazil, Paraná <i>Beauveria bassiana</i> 1061
USA, Maryland <i>Beauveria bassiana</i> 8998	<i>Systema</i> sp. Brazil, Goiás <i>Beauveria bassiana</i> 2079	Denmark <i>Beauveria bassiana</i> 4052
USA, Michigan <i>Aspergillus</i> sp. 6571 <i>Beauveria bassiana</i> 5813	<i>Xanthogaleruca luteola</i> Argentina <i>Beauveria bassiana</i> 5501	Indonesia, Sulawesi Selatan, Celebes <i>Aspergillus parasiticus</i> 2173
USA, New York <i>Beauveria bassiana</i> 534 535 1039 1081 1619 1620 1621 1622 1623 1624 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1721 1722 1723 1749 1750 1775 1776 1777 1778 1779 1780 1781 2030 2031 2032 5533 5534 5535 5536 5537 6986 6987 6988	<i>Zygogramma bicolorata</i> India <i>Metarhizium pingshaense</i> 2231	<i>Metarhizium brunneum</i> 2210
USA, Rhode Island <i>Beauveria bassiana</i> 317	Coleoptera: Chrysomelidae: Hispinae <i>Beauveria bassiana</i> 8494	Unidentified / Hyphomycetes 2225
USA, Washington <i>Beauveria bassiana</i> 344 1079	Coleoptera: Coccinellidae Republic of Korea <i>Beauveria</i> sp. 4853	Papua New Guinea <i>Scopulariopsis</i> sp. 2169
Yugoslavia <i>Beauveria bassiana</i> 505 506 507 510	Russian Federation <i>Beauveria</i> sp. 7591	PR China <i>Isaria catenulata</i> 6241
	Turkey <i>Beauveria</i> sp. 5678 5833	Republic of Korea <i>Beauveria bassiana</i> 2040
	<i>Isaria farinosa</i> 5754 5834	<i>Lecanicillium muscarium</i> 7248
	Unidentified / Hyphomycetes 5677	Unidentified / Hyphomycetes 5695
		USA, Hawaii <i>Beauveria bassiana</i> 8705

Fungus by Host and Location

Coleoptera: Curculionidae

USA, New York Beauveria bassiana 6216 6217	Metarhizium anisopliae sensu lato 725 929	Beauveria sp. 1327
Beauveria brongniartii 6213 6214 6215	USA, Georgia Beauveria bassiana 336 337	Lecanicillium muscarium 1328 1401 1402 1403
USA, Vermont Paecilomyces sp. 5184 5193	Fusarium sp. 2568 2569	USA, Illinois Zoophthora phytonomi 3342 3343 3344
Canada, British Columbia Beauveria bassiana 7978	Chalcodermus bimaculatus Brazil, Goiás Penicillium sp. 2950	Hypera punctata USA, Delaware Zoophthora phytonomi 2188
Indonesia Metarhizium brunneum 2224	Conotrachelus nenuphar Location not specified Beauveria bassiana 1016	USA, New York Zoophthora phytonomi 202
United Kingdom Beauveria bassiana 7769	USA, Michigan Beauveria bassiana 8260 8261 8262 8263	Hypera variabilis Israel Conidiobolus osmodes 79
USA, New York Beauveria bassiana 3667	Fusarium sp. 8266 8267 Lecanicillium muscarium(?) 8265	Conidiobolus sp. 80 81 Zoophthora phytonomi 113 191 192
Anthonomus grandis Brazil Beauveria sp. 1835	Cosmopolites sp. Brazil Beauveria bassiana 1833	Larinus sp. Switzerland Beauveria varroae 2694
Brazil, São Paulo Beauveria bassiana 1966 2559 2638 2639 2945 2946	Cosmopolites sordidus Brazil, Espírito Santo Beauveria bassiana 1483	Listronotus maculicollis USA, New York Metarhizium anisopliae sensu lato 9374
USA, Texas Aspergillus sp. 7048 Beauveria bassiana 3097 7795	West Africa Beauveria bassiana 4798 4799	Listronotus oregonensis Canada, Québec Beauveria bassiana 2983 2984 2985 2986
Anthonomus musculus USA, Massachusetts Beauveria bassiana 3037 Penicillium sp. 3036 Pochonia bulbillosa(?) 3035	Curculio caryae USA Metarhizium robertsii 3608	Metarhizium robertsii 2981
USA, New Jersey Fusarium sp. 3030 3031 3032	USA, Arkansas Sorosporella uvella 1123	Litodactylus leucogaster USA, Florida Isaria javanica 322
Apion sp. Denmark Beauveria bassiana 4023	USA, Georgia Beauveria bassiana 2676	Metamasius sp. Colombia Beauveria bassiana 842
Aracanthus sp. Brazil, Ceará Beauveria bassiana 753	USA, South Carolina Metarhizium robertsii 2575	Metamasius callizona USA, Florida Beauveria bassiana 5986
Brazil, Rio Grande do Sul Unidentified sp. 3478	Cyrtopistomus castaneus USA, Kentucky Beauveria bassiana 2270	Metamasius hemipterus Brazil, Paraná Beauveria bassiana 2642
Artipes sp. USA, Florida Stilbella buquetii 2915	Beauveria brongniartii 2271	Myllocerus discolor India
Blosyrus asellus USA, Hawaii Metarhizium anisopliae sensu lato 9217 9218	Desiantha diversipes Metarhizium anisopliae sensu lato 8568 8569	Metarhizium guizhouense 3603
Brachyderes incanus Netherlands Hirsutella fusiformis 5474	Diaprepes abbreviata Location not specified Beauveria bassiana 433	Oryzophagus oryzae Brazil, Rio Grande do Sul Beauveria bassiana 3098
PR China Isaria cateniamannulata 6243	USA, Florida Aspergillus nidulans(?) 6515	Otiorrhynchus ligustici Hungary Beauveria bassiana 6884 6885
Ceutorhynchus litura Location not specified Beauveria bassiana 3403	Beauveria bassiana 412 416	USA, New York Fusarium sp. 4825
Ceutorhynchus napi Switzerland Conidiobolus coronatus 1572 1573 1574 1575	Cladosporium sphaerospermum 6516	Metarhizium anisopliae sensu lato 4819 4820 4821 4822 4823 4824
Chalcodermus sp. Brazil, Mato Grosso Beauveria bassiana 941 942 943 953	Metarhizium pingshaense 5197	Otiorrhynchus sulcatus Australia Metarhizium brunneum 4228
Chalcodermus aeneus Brazil, Goiás Beauveria bassiana 733 734 735 736 738	Purpureocillium lilacinum 410	France Beauveria bassiana 813 814 815 1073 1074 1075
	Geraeus senilis Mexico Beauveria bassiana 3310 3311	Metarhizium anisopliae sensu lato 818
	Metarhizium anisopliae sensu lato 3305 3306 3308	Metarhizium brunneum 817 820
	Heilipodus erythropus Argentina Beauveria bassiana 8461	Metarhizium flavoviride 2024
	Hypera postica Denmark Beauveria bassiana 4038 4049	Metarhizium flavoviride var. flavoviride 1184
	France Acremonium furcatum 1372	
	Aphanocladium album 1329	
	Beauveria bassiana 1389 1398 1399 1515	

Coleoptera: Curculionidae**Coleoptera: Lagriidae****Fungus by Host and Location**

Germany	1311 1312 1313 1811 1815 1816	<i>Agriotes</i> sp.
	1817 1818 1819 1820 1821	Germany
	<i>Fusarium</i> sp. 1310	<i>Evlachovaea</i> sp. 7403
Location not specified	<i>Sitona humeralis</i>	Switzerland
	France	<i>Metarhizium anisopliae</i> sensu lato
	<i>Beauveria bassiana</i> 1491	7524
Verticillium insectorum	<i>Sitona lineatus</i>	United Kingdom
3715	Denmark	<i>Metarhizium anisopliae</i> sensu lato
New Zealand	<i>Beauveria bassiana</i> 4013 4015 4016	6551
	4019 4021 4041	USA, Oregon
Beauveria bassiana	<i>Isaria farinosa</i> 4039	<i>Metarhizium anisopliae</i> sensu lato
3065 8078	<i>Lecanicillium muscarium</i> 4033	7494
United Kingdom	<i>Metarhizium brunneum</i> 4020	<i>Metarhizium brunneum</i> 2107
	France	<i>Agriotes sputator</i>
Beauveria bassiana	<i>Beauveria bassiana</i> 1156 1157 1158	Denmark
6552 7763	1159 1160 1161 1162 1165 1167	<i>Zoophthora anglica</i> 2505
Metarhizium anisopliae sensu lato	1168 1169 1170 1182 1192 1193	Switzerland
6549	1194 1306	<i>Metarhizium anisopliae</i> sensu lato
Metarhizium anisopliae sensu	<i>Sitophilus</i> sp.	1377
stricto 6546	United Kingdom	<i>Zoophthora anglica</i> 396
Verticillium lecanii	<i>Beauveria bassiana</i> 7764 7773 7774	<i>Athalia rosae</i>
6545	<i>Sitophilus oryzae</i>	Switzerland
USA, Oregon	Republic of Korea	<i>Pandora blunckii</i> 915 917 920 1715
	<i>Cordyceps</i> sp. 4852	1716 1717 1718
Isaria farinosa	<i>Sternechus subsignatus</i>	<i>Conoderus</i> sp.
2937	Brazil, Paraná	New Zealand
Phlyctinus callosus	<i>Beauveria bassiana</i> 1450	<i>Metarhizium anisopliae</i> sensu
Australia	<i>Metarhizium anisopliae</i> sensu lato	stricto 2518
	1989	USA
Beauveria bassiana	Brazil, Rio Grande do Sul	<i>Metarhizium anisopliae</i> sensu lato
8756 8757	Unidentified sp. 3471	1903
Pissodes strobi	<i>Coleoptera: Curculionidae: Apioninae</i>	USA, California
Canada, British Columbia	<i>Cylas formicarius elegantulus</i>	<i>Metarhizium robertsii</i> 1897
	Peru	USA, North Carolina
Lecanicillium muscarium	<i>Beauveria bassiana</i> 5982	<i>Metarhizium robertsii</i> 23
8048 8049	USA, Florida	<i>Limonius canus</i>
8050 8051 8052 8053 8054	<i>Beauveria bassiana</i> 5981	USA, Washington
Lecanicillium pissodis	<i>Coleoptera: Dermestidae</i>	<i>Metarhizium anisopliae</i> sensu lato
8055 8056	Kazakhstan	7000 7001 7002 7003 7004 7005
8057	Verticillium sp. 6484	7006 7007 7008 7009
Premnotrypes latithorax	<i>Coleoptera: Elateridae</i>	<i>Coleoptera: Hispinae</i>
Peru	Australia	<i>Promecotheca papuana</i>
Beauveria bassiana	<i>Metarhizium anisopliae</i> sensu lato	Papua New Guinea
5983 5984	8543 8544 8545 8546 8547 8548	<i>Synnematium jonesii</i> 5664
Premnotrypes suturicallus	Belarus	<i>Coleoptera: Histeridae</i>
Peru	<i>Purpleocillium lilacinum</i> 9524	<i>Carcinops pumilio</i>
Beauveria amorphia	<i>Lecanicillium fungicola</i> 9483	Denmark
1969	Brazil, Ceará	Verticillium lecanii 5856
Premnotrypes vorax	<i>Beauveria bassiana</i> 784 804	<i>Coleoptera: Lagriidae</i>
Colombia	Canada, British Columbia	<i>Lagria vilosa</i>
	<i>Tolyphocladium cylindrosporum</i>	Brazil
Beauveria bassiana	7456	Isaria amoenerosea 4097
2248	France	Brazil, Alagoas
Isaria farinosa	<i>Beauveria bassiana</i> 150	Isaria farinosa 1957
799	Japan	Brazil, Goiás
Rhabdoscelus obscurus	<i>Tilachlidium</i> sp. 2415	<i>Beauveria bassiana</i> 2961
Australia	Russian Federation	Isaria amoenerosea 741 744 2220
	<i>Beauveria brongniartii</i> 9452	2958 2959 2960
Metarhizium anisopliae sensu lato	<i>Beauveria</i> sp. 7580	Isaria fumosorosea 722 2216 2217
8762 8828 8847	<i>Tolyphocladium cylindrosporum</i>	2219 2221
Rhynchites aequatus	7812	<i>Purpleocillium lilacinum</i> 723 2952
Denmark	Turkey	<i>Pochonia chlamydosporia</i> var.
Beauveria bassiana	<i>Beauveria bassiana</i> 5670	<i>chlamydosporia</i> 2218
8037		
Rhynchites baccus		
Turkey		
Beauveria bassiana		
8668		
Rhynchophorus ferrugineus		
Iran		
Beauveria bassiana		
6903		
Shirahoshizo insidiosus		
Japan		
Beauveria sp.		
1681		
Sitona sp.		
France		
Beauveria bassiana		
1647		
New Zealand		
Beauveria bassiana		
3063 8077		
Sitona discoideus		
France		
Beauveria bassiana		
816 1185 1191		
Metarhizium guizhouense		
819		
Morocco		
Beauveria bassiana		
1153 1154 1155		
1163 1164 1171 1172 1173 1174		
1175 1176 1177 1178 1179 1180		
1181 1183 1188 1189 1190 1309		

Fungus by Host and Location

Coleoptera: Lampyridae
Coleoptera: Scarabaeidae

Coleoptera: Lampyridae

- Russian Federation
 - Isaria coleopterorum* 9509
 - Lecanicillium* nr. *aranearum* 9460
- USA, Vermont
 - Beauveria* sp. 5186 5188
- Cratomorphus diaphanus*
Argentina
 - Beauveria bassiana* 8464

Coleoptera: Languriidae

- Costa Rica
 - Beauveria bassiana* 3457

Coleoptera: Meloidae

- Republic of Korea
 - Isaria amoenerosea* 4849

Coleoptera: Melyridae

- Malachius bipustulatus*
Poland
 - Lecanicillium muscarium* 1335

Coleoptera: Nitidulidae

- Australia
 - Beauveria bassiana* 325

Coleoptera: Pythidae

- Pytho* sp.
Canada, British Columbia
 - Beauveria bassiana* 1854

Coleoptera: Rhizophagidae

- Rhizophagus grandis*
Belgium
 - Beauveria bassiana* 1848

Coleoptera: Scarabaeidae

- Australia
 - Metarhizium brunneum* 472
- Brazil, Distrito Federal
 - Metarhizium anisopliae* sensu lato 3479
- Ethiopia
 - Beauveria bassiana* 6686
- Kazakhstan
 - Isaria farinosa* 6488 6489
- Kyrgyz Republic
 - Verticillium* sp. 6486
- Location not specified
 - Beauveria brongniartii* 4380 4381
- Nepal
 - Metarhizium anisopliae* sensu lato 7527 7529
- Papua New Guinea
 - Metarhizium anisopliae* sensu lato 2163
 - Metarhizium pingshaense* 2162
- Poland
 - Metarhizium majus* 1858 1859
- PR China
 - Metarhizium guizhouense* 683
- Republic of Korea
 - Beauveria bassiana* 7264
 - Beauveria sungii* 5689
- Russian Federation
 - Clonostachys rosea* 9491
 - Cordyceps* sp. 7848
 - Engyodontium rectidentatum* 7805

Syria

- Purpureocillium lilacinum* 6110

Turkey

- Beauveria bassiana* 5669

USA, Vermont

- Pochonia chlamydosporia* 3314

Uzbekistan

- Beauveria bassiana* 6058

Adoryphorus sp.

Australia

- Metarhizium frigidum* 4124

Adoryphorus coulonii

- Metarhizium anisopliae* sensu lato 4142 4239

Australia

- Beauveria amorpha* 4149

- Beauveria bassiana* 4135 4136 4274

4721

- Metarhizium anisopliae* sensu lato 4137 4138 4141 4346 4677 4716

4722 7815

- Metarhizium flavoviride* var.

flavoviride 4719 4720

- Sterile mycelium 4243

Amphimallon majale

USA, New York

- Metarhizium anisopliae* sensu lato 9373

Amphimallon solstitialis

Denmark

- Beauveria caledonica* 8024

Anognathus scarabaeoides

Colombia

- Beauveria bassiana* 2249 2250

- Metarhizium robertsii* 797

Anomala costata

Japan

- Beauveria amorpha* 1676

- Beauveria brongniartii* 985

Anomala cuprea

- Cordyceps brongniartii* 7517

Japan

- Beauveria bassiana* 1683

- Beauveria* sp. 1682

- Cordyceps brongniartii* 7516

Anomola sp.

Myanmar

- Metarhizium anisopliae* sensu lato 8738 8739 8740 8741 8742 8743

Anoplognathus sp.

Australia

- Beauveria bassiana* 8763

- Metarhizium anisopliae* sensu lato 8764

- Metarhizium majus* 4566 4601 7505

Anoplognathus hirsutus

Australia

- Metarhizium anisopliae* sensu lato 4574 4779

Antitrogus consanguineus

Australia

- Metarhizium anisopliae* sensu lato 8761

Antitrogus mussoni

Australia

- Metarhizium anisopliae* sensu lato 7842 7865 7931

- Metarhizium pingshaense* 7417

Antitrogus parvulus

- Metarhizium anisopliae* sensu lato 8832 8893

Australia

- Metarhizium anisopliae* sensu lato 7496 7819 7839 7854 7864 8833 8834

- Metarhizium pingshaense* 7410

Aphodius fimetarius

Denmark

- Verticillium lecanii* 4047

Aphodius howitti

Location not specified

- Ophiocordyceps aphodii* 5498

Aphodius tasmaniae

Australia

- Metarhizium anisopliae* sensu lato 4125 4132 4133 4139 7845

- Metarhizium brunneum* 346 4131

- Unidentified sp. 4140

New Zealand

- Beauveria bassiana* 3070 8079

Costelytra zealandica

Netherlands

- Beauveria brongniartii* 7761

New Zealand

- Beauveria bassiana* 3055

- Beauveria brongniartii* 3054

- Metarhizium anisopliae* sensu lato 3056 3057

- Metarhizium pingshaense* 7435

Cyclocephala sp.

Australia

- Metarhizium anisopliae* sensu lato 8837 8838

Dasygnathus dejeani

Australia

- Metarhizium anisopliae* sensu lato 8839

Dermolepida albohirtum

- Metarhizium anisopliae* sensu lato 7492

- Metarhizium* sp. 7493

Australia

- Metarhizium anisopliae* var. *lepidiotae* 7453

- Metarhizium anisopliae* sensu lato 7452 8744 8754 8755 10469

- Metarhizium lepidiotae* 7488

Diloboderus abderus

Argentina

- Metarhizium brunneum* 6120

Heptophylla picea

Japan

- Paecilomyces canadensis* 984

Heteronychus arator

Australia

- Metarhizium anisopliae* sensu lato 7932 7933 7934 7935 7936 8549

- 8550 8551 8552 8553 8554 8555

- 8556 8557 8576 8848 8849

Coleoptera: Scarabaeidae

Fungus by Host and Location

<i>Heteronyx</i> sp.	<i>Metarhizium robertsii</i> 7424
Australia	
<i>Metarhizium anisopliae</i> sensu lato	8592 8615 8616 8617 8618 8619
<i>Metarhizium robertsii</i> 7449	
<i>Heteronyx piceus</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7451 8500 8558 8559 8582 8583
<i>Metarhizium anisopliae</i> sensu stricto	7450
<i>Heteronyx rugosipennis</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	8563 8564 8565 8566 8567 8577
<i>Metarhizium anisopliae</i> sensu stricto	8610
<i>Holotrichia consanguinea</i>	
India	
<i>Metarhizium anisopliae</i> sensu stricto	10475
<i>Holotrichia parallela</i>	
China	
<i>Beauveria asiatica</i> 4384 4474	
<i>Beauveria brongniartii</i> 4385 4386	
4388 4465 4466 4467 4468 4469	
4470 4471 4472 4473 4475 4476	
4477 4478	
<i>Mixed Culture</i> sp. 4387	
<i>Holotrichia serrata</i>	
India	
<i>Metarhizium anisopliae</i> sensu stricto	10472 10476
<i>Lachnostenra bidentata</i>	
Malaysia	
<i>Metarhizium flavoviride</i> 8737	
<i>Lachnostenra morosa</i>	
Japan	
<i>Beauveria sungii</i> 1685	
<i>Lepidiota consobrina</i>	
Metarhizium anisopliae sensu lato	8830 8831
Australia	
<i>Metarhizium anisopliae</i> var. <i>lepidiotae</i>	8732
<i>Metarhizium anisopliae</i> sensu lato	7411 7827 7828 7846 8845 8850
<i>Metarhizium lepidiotae</i> 7412	
<i>Lepidiota frenchi</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7829 7830 7831 8733
<i>Lepidiota gibbifrons</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7824 7825 7826
<i>Lepidiota negatoria</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7832
<i>Lepidiota noxia</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7504

<i>Lepidiota picticollis</i>	
<i>Metarhizium anisopliae</i> sensu lato	8501
<i>Lepidiota squamulata</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	7816
<i>Melolontha</i> sp.	
Germany	
<i>Beauveria brongniartii</i> 5355 5356	5357 5358 5359 5360 5361 5362
5363 5364	
<i>Melolontha melolontha</i>	
France	
<i>Beauveria brongniartii</i> 617 979	
<i>Metarhizium guizhouense</i> 977	
Switzerland	
<i>Beauveria brongniartii</i> 1067 1068	1069 1070 1071 1072 1076 1077
7528	
<i>Melolontha melolontha</i>	
France	
<i>Beauveria brongniartii</i> 617 979	
<i>Metarhizium guizhouense</i> 977	
<i>Oryctes</i> sp.	
Papua New Guinea	
<i>Metarhizium anisopliae</i> sensu lato	2156 2165 2166 2167
Philippines	
<i>Metarhizium majus</i> 1914	
<i>Oryctes rhinoceros</i>	
France	
<i>Metarhizium anisopliae</i> var. <i>majus</i>	3145
<i>Metarhizium majus</i> 978	
Indonesia, Jawa Barat, Java	
<i>Metarhizium anisopliae</i> var. <i>majus</i>	2151
Philippines	
<i>Metarhizium majus</i> 1946	
Thailand	
<i>Metarhizium pingshaense</i> 538	
<i>Pachnodia interrupta</i>	
Ethiopia	
<i>Aspergillus flavus</i> 6454	
<i>Beauveria bassiana</i> 6669 6676 6681	
<i>Metarhizium anisopliae</i> sensu lato	6670 6671 6672 6673 6674 6675
6677 6678 6679 6680 6682 6683	
6684 6685	
<i>Papuana</i> sp.	
Papua New Guinea	
<i>Metarhizium anisopliae</i> sensu lato	8748
<i>Papuana woodlarkiana</i>	
Papau New Guinea	
<i>Metarhizium guizhouense</i> 4604	
<i>Phyllopertha horticola</i>	
Norway	
<i>Metarhizium anisopliae</i> sensu lato	6901
<i>Metarhizium brunneum</i> 6477	
<i>Phyllophaga</i> sp.	
Mexico	
<i>Beauveria bassiana</i> 5740 5741 5742	5743 5744 5745
<i>Phyllophaga ?anxia</i>	
Canada	
<i>Metarhizium anisopliae</i> sensu lato	2135 2136 2137 2138 2139
<i>Metarhizium robertsii</i> 2134	
<i>Phyllophaga anxia</i>	
Canada	
<i>Metarhizium anisopliae</i> sensu lato	8499
<i>Phyllophaga cuyabana</i>	
Brazil, Paraná	
<i>Metarhizium anisopliae</i> sensu stricto	3924
<i>Phyllophaga menetriesi</i>	
Colombia	
<i>Evlachovaea</i> sp. 7551	
<i>Popillia japonica</i>	
Azores	
<i>Beauveria amorphia</i> 4990	
<i>Beauveria brongniartii</i> 4992 4993	4994 4995
Japan	
<i>Beauveria brongniartii</i> 4389 4458	
<i>Beauveria</i> sp. 4390 4391 4392	
<i>Metarhizium robertsii</i> 1046	
Unidentified / Hyphomycetes	5223
5224 5225 5226 5227	
Location not specified	
<i>Beauveria bassiana</i> 3716 3717	
<i>Cordyceps</i> sp. 3718 3714 3719	
Portugal	
<i>Beauveria bassiana</i> 5148 5150	
<i>Isaria fumosorosea</i> 2679	
<i>Metarhizium anisopliae</i> sensu lato	3329 4907 4908
<i>Metarhizium brunneum</i> 3864	
<i>Metarhizium robertsii</i> 5149	
Unidentified sp. 3841	
USA, Connecticut	
<i>Metarhizium anisopliae</i> sensu lato	3713 3720
<i>Metarhizium robertsii</i> 3721	
Unidentified sp. 3722	
USA, New York	
<i>Metarhizium anisopliae</i> sensu lato	1280 2548 3330 3331 3332 3333
3334 3335 3336 3337 3338 3339	
3340 9372	
<i>Metarhizium robertsii</i> 1298 1878	
<i>Purpureocillium lilacinum</i> 9371	
<i>Rhizotrogus majalis</i>	
USA, New York	
<i>Metarhizium robertsii</i> 2547 3108	3211 4123
Unidentified / Hyphomycetes	2999
<i>Rhopaea magnicornis</i>	
Australia	
<i>Beauveria bassiana</i> 4130 7813 8853	8854
<i>Isaria fumosorosea</i> 8892	
<i>Metarhizium anisopliae</i> sensu lato	8492 8765 8766 8767 8829 8844
<i>Metarhizium</i> sp. 7495 8851 8852	8855 8856 8857

Fungus by Host and Location

<i>Rhopaea verreauxii</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	
8495	
<i>Scapanes australis</i>	
Papua New Guinea	
<i>Metarhizium pingshaense</i> 3604	
<i>Sericesthis micans</i>	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	
4568 4777 4778	
<i>Sericesthis nigrolineata</i>	
Australia	
<i>Beauveria bassiana</i> 7853	
<i>Metarhizium anisopliae</i> sensu lato	
4780 7814 7863	
<i>Sericethis</i> sp.	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	
4134 4236	
<i>Strigoderma arboricola</i>	
USA, Michigan	
<i>Metarhizium robertsii</i> 1968	
<i>Xyloryctes jamaicensis</i>	
India	
<i>Beauveria</i> sp. 2412	
Western Samoa	
<i>Metarhizium anisopliae</i> var. <i>majus</i>	
297 298	
Coleoptera: Scarabaeidae: Aphodiinae	
USA, New York	
<i>Tolypocladium inflatum</i> 4877 4878	
4879 4880 4881 4882 4883 4884	
4885 4886 4887 4888 4889 4890	
4891 4892 4893 4894 4895 4896	
4897 4898	
Coleoptera: Scarabaeidae: Melolonthinae	
<i>Antitrogus rugulosus</i>	
Australia	
<i>Paraisaria dubia</i> 5764	
Coleoptera: Scolytidae	
Switzerland	
<i>Beauveria bassiana</i> 1566	
<i>Beauveria caledonica</i> 1567	
USA, Hawaii	
<i>Beauveria bassiana</i> 3040	
<i>Dendroctonus micans</i>	
Denmark	
<i>Lecanicillium muscarium</i> 4036	
Turkey	
<i>Beauveria bassiana</i> (?) 9271	
<i>Beauveria</i> sp. 9272 9273 9274	
<i>Isaria farinosa</i> 9269 9270 9275 9276	
9277 9278	
<i>Lecanicillium muscarium</i> 9267	
9268	
<i>Dendroctonus ponderosae</i>	
Canada, British Columbia	
<i>Beauveria bassiana</i> 1849 1853	
<i>Dendroctonus rufipennis</i>	
Canada, British Columbia	
<i>Evlachovaea</i> sp. 1017	

<i>Dryocoetes confusus</i>	
Canada	
<i>Beauveria bassiana</i> 9184	
Canada, British Columbia	
<i>Beauveria bassiana</i> 1852	
<i>Hypothenemus hampei</i>	
Benin	
<i>Fusarium</i> sp. 5875 5878	
<i>Purpureocillium lilacinum</i> 5876	
5877 5880 5882 6188 6190	
Brazil, São Paulo	
<i>Beauveria bassiana</i> 1480	
Cameroon	
<i>Beauveria bassiana</i> 6526 6527 6528	
6529 6530 6531 6532	
Colombia	
<i>Acremonium alternatum</i> 7282	
<i>Fusarium</i> sp. 6602	
Indonesia, Sulawesi	
<i>Fusarium</i> sp. 7063	
Ivory Coast	
<i>Beauveria bassiana</i> 5436 5437 5438	
5439 5440 5441 5442 5459 5460	
5477 5482 5483 5484 5485 5486	
5487	
<i>Fusarium</i> sp. 5461	
<i>Isaria fumosorosea</i> 6730	
Kenya	
<i>Beauveria bassiana</i> 2685 2686 2687	
Mexico	
<i>Beauveria bassiana</i> 2693 3818 3819	
<i>Isaria fumosorosea</i> 7284	
Nicaragua	
<i>Beauveria bassiana</i> 3440 3443 3445	
3448 3453	
Sri Lanka	
<i>Beauveria bassiana</i> 7758	
Togo	
<i>Beauveria bassiana</i> 2688 2689 2690	
2691 2692 5443 5444 5445 5446	
5447 5448 5449 5450 5451 5452	
5453 5454 5455 5456 5457 5458	
5478 5479 5480 5481 5488 5489	
5490	
Uganda	
<i>Fusarium</i> sp. 5879	
USA, Hawaii	
<i>Beauveria bassiana</i> 10471	
USA, Texas	
<i>Candida</i> sp. 5729	
<i>Ips</i> sp.	
Canada, British Columbia	
<i>Beauveria pseudobassiana</i> 1855	
<i>Ips stenographus</i>	
Norway	
<i>Beauveria bassiana</i> 6900	
<i>Ips typographus</i>	
Denmark	
<i>Beauveria brongniartii</i> 4024	
Switzerland	
<i>Beauveria bassiana</i> 7525 7526	
<i>Tomicus minor</i>	
France	
<i>Beauveria bassiana</i> 5070 5071	
<i>Beauveria pseudobassiana</i> 4933	
Coleoptera: Scarabaeidae	
Coleoptera: Tenebrionidae	
<i>Tomicus pimperda</i>	
France	
<i>Beauveria</i> sp. 4909 4910 4911 4912	
4913 4914 4915 4916 4917 4918	
Coleoptera: Scolytidae (Tribe Ipini)	
PR China	
<i>Beauveria pseudobassiana</i> 6229	
Coleoptera: Silphidae	
Russian Federation	
<i>Isaria farinosa</i> 9511	
<i>Lecanicillium</i> sp. 9459	
Coleoptera: Staphylinidae	
Australia	
<i>Metarhizium anisopliae</i> sensu lato	
8734	
Denmark	
<i>Beauveria bassiana</i> 4055	
USA, Nebraska	
<i>Beauveria bassiana</i> 3112	
<i>Anotylus rugosus</i>	
Denmark	
<i>Beauveria bassiana</i> 4051 4056	
<i>Anotylus</i> sp.	
Denmark	
<i>Beauveria bassiana</i> 4046	
<i>Gyrohypnus angustatus</i>	
Denmark	
<i>Beauveria bassiana</i> 4054	
<i>Staphylinus olens</i>	
Denmark	
<i>Isaria farinosa</i> 4040	
<i>Tachyporus hypnorum</i>	
Denmark	
<i>Lecanicillium longisporum</i> 4050	
<i>Tachyporus</i> sp.	
Denmark	
<i>Beauveria bassiana</i> 4028	
Coleoptera: Tenebrionidae	
Brazil, Ceará	
<i>Beauveria bassiana</i> 757 783 787	
Kazakhstan	
<i>Beauveria bassiana</i> 6478 6483	
<i>Verticillium lecanii</i> 6487	
Republic of Korea	
<i>Isaria farinosa</i> 5699	
Uzbekistan	
<i>Beauveria bassiana</i> 6057 6064 6077	
6078 6096 6113	
<i>Alphitobius diaperinus</i>	
<i>Beauveria bassiana</i> 5836 5838 5839	
5840 5843	
<i>Isaria fumosorosea</i> 5844 5845 5846	
5847	
<i>Metarhizium anisopliae</i> sensu lato	
5837 5841 5842 5848 5850	
5849	
<i>Verticillium lecanii</i> 5849	
Denmark	
<i>Isaria farinosa</i> 5858	
USA, West Virginia	
<i>Beauveria bassiana</i> 7941	
<i>Pterohelaeus darlingensis</i>	
Australia	
<i>Beauveria bassiana</i> 8065	

<i>Tenebrio molitor</i>	
<i>Aspergillus flavus</i>	9381
Denmark	
<i>Beauveria bassiana</i>	8038
Finland	
<i>Beauveria bassiana</i>	5623
<i>Isaria fumosorosea</i>	5627
<i>Metarhizium brunneum</i>	5626
Republic of China	
<i>Isaria farinosa</i>	8917
<i>Lecanicillium muscarium</i>	8923
<i>Metarhizium anisopliae</i> sensu lato	
8775 8776 8777 8778 8779 8780	
8781 8782 8783 8784 8785 8786	
8787 8788 8789 8790 8791 8792	
8793 8794 8795 8796 8797 8798	
8799 8858 8859 8860 8861 8862	
8863 8864 8865 8866 8867 8868	
8869 8870 8871 8872 8873 8874	
8875 8876 8877 8878 8879 8880	
8881 8882 8883 8884 8885 8886	
8887 8894 8895 8896 8897 8898	
8899 8900 8901 8902 8903 8904	
8905 8906 8907 8908 8909 8910	
8911 8912 8913 8914 8915 8916	
8941 8942 8943 8944 8945 8946	
8947 8948 8949 8950 8951 8952	
8953 8954 8955 9235 9236	
<i>Purpureocillium lilacinum</i>	8918
8919 8920 8921 8922	
<i>Tribolium castaneum</i>	
Finland	
<i>Beauveria</i> sp.	5622
<i>Metarhizium anisopliae</i> sensu lato	
5624	
<i>Metarhizium brunneum</i>	5625
USA, Washington	
<i>Metarhizium anisopliae</i> sensu lato	
3389	
<i>Metarhizium robertsii</i>	3388

Geographical Origin

	Argentina Canada
Argentina	
Buenos Aires	
<i>Beauveria bassiana</i> 5501 7202 7466 7471 8461 8520 8521 8522 8523 8524 8525 8526 8530	
<i>Beauveria</i> sp. 7463	
<i>Metarhizium brunneum</i> 6120	
Corrientes	
<i>Beauveria bassiana</i> 8464	
Tucumán	
<i>Beauveria bassiana</i> 2010 2509 2515 7470 8372 8373 8462 8463	
Australia	
<i>Metarhizium anisopliae</i> sensu lato 4125	
<i>Metarhizium brunneum</i> 4228	
Australian Capital Territory	
<i>Beauveria bassiana</i> 7853	
<i>Metarhizium anisopliae</i> sensu lato 7863 8837 8838	
New South Wales	
<i>Beauveria bassiana</i> 4130 7813 8763 8853 8854	
<i>Isaria fumosorosea</i> 8892	
<i>Metarhizium anisopliae</i> sensu lato 4568 4574 4777 4778 4779 4780 7498 7499 7500 7814 8492 8495 8764 8765 8766 8767 8829 8844	
<i>Metarhizium brunneum</i> 472	
<i>Metarhizium majus</i> 4566 4601	
<i>Metarhizium</i> sp. 7495 8851 8852 8855 8856 8857	
Northern Territory	
<i>Metarhizium anisopliae</i> sensu lato 8745 8746 8747	
Queensland	
<i>Beauveria bassiana</i> 325 8065	
<i>Metarhizium anisopliae</i> var. <i>lepidiotae</i> 7453 8732	
<i>Metarhizium anisopliae</i> sensu lato 7411 7451 7452 7496 7504 7816 7819 7824 7825 7826 7827 7828 7829 7830 7831 7832 7839 7842 7843 7844 7846 7854 7864 7865 7931 8500 8558 8559 8563 8564 8565 8566 8567 8577 8582 8583 8586 8592 8610 8615 8616 8617 8618 8619 8620 8621 8733 8734 8744 8754 8755 8761 8762 8828 8833 8834 8839 8845 8847 8850 10469	
<i>Metarhizium anisopliae</i> sensu stricto 7450	
<i>Metarhizium lepidiotae</i> 7412 7488	
<i>Metarhizium majus</i> 7505	
<i>Metarhizium pingshaense</i> 7410 7417	
<i>Metarhizium robertsii</i> 7449	
<i>Paraisaria dubia</i> 5764	
South Australia	
<i>Metarhizium anisopliae</i> sensu lato 4132 4133 4139 7845	
<i>Metarhizium brunneum</i> 346 4131	
Tasmania	
<i>Beauveria amorphula</i> 4149	
<i>Beauveria bassiana</i> 4135 4136 4274 4721 8835 8836	
<i>Isaria fumosorosea</i> 8840	
Metarhizium anisopliae sensu lato	
4134 4137 4138 4141 4236 4346 4677 4716 4722	
<i>Metarhizium flavoviride</i> var. <i>flavoviride</i> ■ 4719 4720	
<i>Sterile mycelium</i> 4243	
<i>Unidentified sp.</i> 4140	
Victoria	
<i>Beauveria bassiana</i> 8756 8757	
<i>Metarhizium anisopliae</i> sensu lato 7815 8543 8544 8545 8546 8547 8548	
<i>Metarhizium frigidum</i> 4124	
Western Australia	
<i>Metarhizium anisopliae</i> sensu lato 7932 7933 7934 7935 7936 8549 8550 8551 8552 8553 8554 8555 8556 8557 8576 8848 8849	
<i>Metarhizium robertsii</i> 7424	
Azores	
<i>Beauveria amorphula</i> 4990	
<i>Beauveria brongniartii</i> 4992 4993 4994 4995	
Belarus	
<i>Isaria</i> sp. 9519	
<i>Polycephalomyces</i> sp. 9497	
<i>Lecanicillium fungicola</i> 9483	
Belgium	
<i>Beauveria bassiana</i> 1848	
Benin	
<i>Fusarium</i> sp. 5875 5878	
<i>Polycephalomyces</i> sp. 5876 5877 5880 5882 6188 6190	
Brazil	
<i>Beauveria bassiana</i> 1833 3219	
<i>Beauveria</i> sp. 1835	
<i>Isaria amoenerosea</i> 4097	
Alagoas	
<i>Beauveria bassiana</i> 1954 1956	
<i>Isaria farinosa</i> 1957	
Amazonas	
<i>Beauveria bassiana</i> 731 732 756 2512 <i>Isaria fumosorosea</i> 2956	
Bahia	
<i>Beauveria bassiana</i> 1961 2075	
<i>Metarhizium anisopliae</i> sensu lato 1958	
Ceará	
<i>Beauveria bassiana</i> 753 757 783 784 785 786 787 788 804 805 4001	
Distrito Federal	
<i>Metarhizium anisopliae</i> sensu lato 3479	
Espírito Santo	
<i>Beauveria bassiana</i> 1483	
Goiás	
<i>Beauveria bassiana</i> 733 734 735 736 738 739 752 754 758 809 928 930 931 934 956 1476 1971 2079 2625 2626 2938 2942 2961	
<i>Isaria amoenerosea</i> 741 744 2220 2958 2959 2960	
Cameroon	
Centre-Sud	
<i>Beauveria bassiana</i> 6526 6527 6528 6529 6530 6531 6532	
Canada	
<i>Beauveria bassiana</i> 9184	
<i>Metarhizium anisopliae</i> sensu lato 2135 2136 2137 2138 2139 8499	
<i>Metarhizium robertsii</i> 2134	
British Columbia	
<i>Beauveria bassiana</i> 1849 1852 1853 1854 7972 7978	
<i>Beauveria pseudobassiana</i> 1855	
<i>Evlachovaea</i> sp. 1017	
<i>Lecanicillium muscarium</i> 8048 8049 8050 8051 8052 8053 8054	
<i>Lecanicillium pissodis</i> 8055 8056 8057	
<i>Tolypocladium cylindrosporum</i> 7456	
Ontario	
<i>Beauveria bassiana</i> 5807	
Québec	
<i>Beauveria bassiana</i> 2983 2984 2985 2986 2987 2988 2989 2990 2991	
<i>Metarhizium robertsii</i> 2981	

China

- Beauveria asiatica* 4384 4474
- Beauveria brongniartii* 4385 4386
4388 4465 4466 4467 4468 4469
- 4470 4471 4472 4473 4475 4476 4477
4478
- Mixed Culture* sp. 4387

Colombia

- Beauveria bassiana* 842
- Caldas
Acremonium alternatum 7282
- Fusarium* sp. 6602
- Cauca
Evlachovaea sp. 7551
- Cundinamarca
Metarhizium robertsii 797
- Nariño
Beauveria bassiana 2248 2249 2250
- Isaria farinosa* 799
- Valle del Cauca
Beauveria bassiana 721

Commonwealth of Independent States

- Beauveria bassiana* 2695

Costa Rica

- Cartago
Beauveria bassiana 3437 3438 3439
3441 3442 3444 3446 3447 3450 3451
3452 3455 3457

Denmark

- Batko* sp. 5810
- Beauveria bassiana* 4019
- Beauveria brongniartii* 4024
- Isaria farinosa* 4043 4044
- Lecanicillium muscarium* 4036
- Verticillium lecanii* 4022

Århus
Metarhizium brunneum 4020

Funen
Beauveria bassiana 5857

Fyn
Beauveria bassiana 4051 4055 4056

Jutland
Beauveria bassiana 4021 4031

Isaria farinosa 5858

Verticillium lecanii 5856

Lammfjorden
Erynia sp. 2664

Storstrøm
Beauveria bassiana 4015

Vestsjælland
Zoophthora anglica 2505

Zealand
Beauveria bassiana 4013 4018 4023
4034 4038 4041 4046 4049 4052 4054
8037 8038

Beauveria caledonica 8024

Beauveria sp. 4027

Fusarium sp. 4011

Isaria farinosa 4039 4045

Lecanicillium longisporum 4050

Sterile mycelium 4009

Unidentified sp. 4037

Verticillium lecanii 4047 4048

Zeeland

- Beauveria bassiana* 4016 4028 4032
- Erynia* sp. 2525 2536 2537 2538 2539
2553 2663
- Isaria farinosa* 4029 4040
- Lecanicillium muscarium* 4033

Ecuador

- Beauveria bassiana* 2557

Ethiopia

- Gojam
Beauveria bassiana 6693
- Northern Shoa
Aspergillus flavus 6454
- Beauveria bassiana* 6669 6676 6681
- Metarhizium anisopliae* sensu lato
6670 6671 6672 6673 6674 6675 6677
6678 6679 6680 6682 6683 6684 6685
- Sidamo
Beauveria bassiana 6689
- Tigray
Beauveria bassiana 6695 6696 6697
- Welo
Beauveria bassiana 6692
- Western Shoa
Beauveria bassiana 6686

Finland

- Beauveria* sp. 5622
- Isaria fumosorosea* 5627
- Hämeen Lääni
Metarhizium brunneum 5626
- Uudenmaan Lääni
Metarhizium anisopliae sensu lato
5624
- Vaasan Lääni
Beauveria bassiana 5623
- Metarhizium brunneum* 5625

France

- Phanocladium album* 1329
- Beauveria bassiana* 149 150 384 1157
1159 1160 1165 1167 1168 1169 1170
1182 1186 1306 1389 1515 1982
- Beauveria brongniartii* 617 979
- Lecanicillium muscarium* 1328 1401
1402 1403
- Metarhizium anisopliae* var. *majus*
3145
- Metarhizium guizhouense* 977
- Metarhizium majus* 978

Ardennes

- Beauveria bassiana* 1647

Charente

- Scopulariopsis* sp. 2327

Charente-Maritime

- Beauveria bassiana* 1975 1980

de Gourgas

- Beauveria pseudobassiana* 4933
- Isaria farinosa* 5080

Drôme

- Beauveria bassiana* 1398 1399

Eure

- Beauveria bassiana* 1073 1074 1075
1158 1193

Eure-et-Loir

- Beauveria bassiana* 1192

Finistere

- Beauveria bassiana* 813 814 815
- Metarhizium anisopliae* sensu lato
818
- Metarhizium brunneum* 817

Haute-Savoie

- Acremonium furcatum* 1372

Hérault

- Beauveria bassiana* 816 1185 5070
5071 5072

- Isaria farinosa* 5073 5074 5075
- Metarhizium guizhouense* 819

La Valette

- Unidentified sp. 3980

Loire

- Unidentified sp. 1634

Loiret

- Beauveria bassiana* 1191

Maine-et-Loire

- Metarhizium brunneum* 820

Morbihan

- Metarhizium flavoviride* 2024
- Metarhizium flavoviride* var. *flavoviride*■
1184

Réunion

- Metarhizium anisopliae* sensu lato
3148

Vaucluse

- Beauveria bassiana* 1509 1510 1511
1518 1519
- Beauveria* sp. 4909 4910 4911 4912
4913 4914 4915 4916 4917 4918

- Isaria farinosa* 1507 1508

- Isaria fumosorosea* 1506

- Lecanicillium lecanii* 1505

Vienne

- Beauveria bassiana* 1491

Vosges

- Beauveria* sp. 1327

Yvelines

- Beauveria bassiana* 1156 1161 1162
1194 2463

Germany

- Metarhizium brunneum* 5198

- Metarhizium robertsii* 1910

Hesse

- Beauveria bassiana* 340

- Beauveria brongniartii* 5355 5356
5357 5358 5359 5360 5361 5362
5363 5364

Rheinhessen-Pfalz

- Evlachovaea* sp. 7403

Ghana

- Unidentified / Hyphomycetes 8641

Hungary

Csongrád

- Beauveria bassiana* 6884 6885

Geographical Origin

India
Poland

India	Tokyo Prefecture <i>Beauveria brongniartii</i> 2660 <i>Beauveria</i> sp. 2412 <i>Metarhizium guizhouense</i> 3603 <i>Metarhizium pingshaense</i> 2231 3210 Tamil Nadu <i>Beauveria</i> sp. 8250 <i>Metarhizium anisopliae</i> sensu stricto 10472 10475 10476	Nepal <i>Cordyceps scarabaeicola</i> 7277 7278 Parbat District <i>Metarhizium anisopliae</i> sensu lato 7527 7529
Indonesia	<i>Metarhizium brunneum</i> 2224 Jawa Barat, Java <i>Metarhizium anisopliae</i> var. <i>majus</i> 2151 Sulawesi <i>Fusarium</i> sp. 7063 Sulawesi Selatan, Celebes <i>Aspergillus parasiticus</i> 2173 <i>Metarhizium brunneum</i> 2210 Unidentified / Hyphomycetes 2225	Netherlands <i>Beauveria brongniartii</i> 7761 <i>Hirsutella fusiformis</i> 5474
Iran	Sistan Va Baluchestan <i>Beauveria bassiana</i> 6903	New Zealand <i>Metarhizium anisopliae</i> sensu stricto 2518 South Island <i>Beauveria bassiana</i> 3055 3063 3065 3066 3070 8077 8078 8079 <i>Beauveria brongniartii</i> 3054 <i>Metarhizium anisopliae</i> sensu lato 3056 3057 <i>Metarhizium pingshaense</i> 7435
Israel	<i>Conidiobolus osmodes</i> 79 <i>Conidiobolus</i> sp. 80 81 <i>Zoophthora phytonomi</i> 113 191 192	Nicaragua <i>Beauveria bassiana</i> 3440 3443 3445 3448 3453
Italy	<i>Beauveria bassiana</i> 1559 1560 1561 1562 1563 Sicily <i>Beauveria bassiana</i> 1106	Norway Akershus <i>Beauveria bassiana</i> 6900 Østfold <i>Metarhizium anisopliae</i> sensu lato 6901 <i>Metarhizium brunneum</i> 6477
Ivory Coast	<i>Beauveria bassiana</i> 5436 5437 5438 5439 5440 5441 5442 5459 5460 5477 5482 5483 5484 5485 5486 5487 <i>Fusarium</i> sp. 5461 <i>Isaria fumosorosea</i> 6730	Papau New Guinea Morobe Province <i>Metarhizium guizhouense</i> 4604
Japan	<i>Beauveria brongniartii</i> 6235 <i>Harposporium janus</i> 5601 Aichi Prefecture <i>Beauveria bassiana</i> 1041 Aomori Prefecture <i>Mixed Culture</i> sp. 1043 Hokkaido <i>Beauveria brongniartii</i> 4389 4458 <i>Beauveria</i> sp. 4390 4391 4392 Unidentified / Hyphomycetes 5223 5224 5225 5226 5227 Ibaraki Prefecture <i>Beauveria brongniartii</i> 6412 <i>Beauveria sungii</i> 1685 Kumamoto Prefecture <i>Beauveria bassiana</i> 1679 Nagano Prefecture <i>Beauveria amorphula</i> 1676 <i>Beauveria bassiana</i> 1683 <i>Beauveria</i> sp. 1682 <i>Cordyceps brongniartii</i> 7516 Nagasaki Prefecture <i>Beauveria bassiana</i> 1678	Papua New Guinea <i>Metarhizium anisopliae</i> sensu lato 2156 2163 2165 2166 2167 8748 <i>Metarhizium pingshaense</i> 2162 3604 <i>Scopulariopsis</i> sp. 2169 <i>Synnematium jonesii</i> 5664
Morocco	<i>Beauveria bassiana</i> 1153 1154 1155 1163 1164 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1183 1188 1189 1190 1309 1311 1312 1313 1811 1815 1816 1817 1818 1819 1820 1821 <i>Fusarium</i> sp. 1310	Peru <i>Beauveria bassiana</i> 5982 Andes Mountains <i>Beauveria amorphula</i> 1969 Junín <i>Beauveria bassiana</i> 5983 La Libertad <i>Beauveria bassiana</i> 5984
Myanmar	<i>Metarhizium anisopliae</i> sensu lato 8738 8739 8740 8741 8742 8743	Philippines Benguet <i>Beauveria bassiana</i> 3197 3198 3199 Manila <i>Beauveria brongniartii</i> 1431 <i>Isaria farinosa</i> 2355 Quezon <i>Metarhizium majus</i> 1914 1946
Poland	<i>Beauveria bassiana</i> 157 301 <i>Lecanicillium muscarium</i> 1335 <i>Metarhizium majus</i> 1858 1859 <i>Polycephalomyces formosus</i> 1424	

Portugal

- Azores
 - Beauveria bassiana* 5148 5150
 - Isaria fumosorosea* 2679
 - Metarhizium anisopliae* sensu lato
3329 4907 4908
 - Metarhizium brunneum* 3864
 - Metarhizium robertsii* 5149
 - Unidentified sp. 3841

PR China

- Beauveria bassiana* 6387
- Anhui
 - Beauveria amorpho(?)* 6827
 - Beauveria bassiana* 6390 8414
 - Isaria cateniananulata* 6241 6243
 - Isaria cateniobliqua* 6244
 - Metarhizium pingshaense* 8420
 - Scopulariopsis* sp. 8421
- Gansu Province
 - Beauveria bassiana* 7155 7164
- Guizhou Province
 - Beauveria pseudobassiana* 6229
 - Isaria fumosorosea* 9602
- Hebei Province
 - Beauveria bassiana* 7156 7157 7166
7167 7168 7169 7170 7171 7172 7173
7174 7175 7176 7177 7178
- Kwon Tung
 - Metarhizium guizhouense* 683

Republic of China

- Taiwan
 - Isaria farinosa* 8917
 - Lecanicillium muscarium* 8923
 - Metarhizium anisopliae* sensu lato
8775 8776 8777 8778 8779 8780 8781
8782 8783 8784 8785 8786 8787 8788
8789 8790 8791 8792 8793 8794 8795
8796 8797 8798 8799 8858 8859 8860
8861 8862 8863 8864 8865 8866 8867
8868 8869 8870 8871 8872 8873 8874
8875 8876 8877 8878 8879 8880 8881
8882 8883 8884 8885 8886 8887 8894
8895 8896 8897 8898 8899 8900 8901
8902 8903 8904 8905 8906 8907 8908
8909 8910 8911 8912 8913 8914 8915
8916 8941 8942 8943 8944 8945 8946
8947 8948 8949 8950 8951 8952 8953
8954 8955 9235 9236
 - Purpureocillium lilacinum* 8918 8919
8920 8921 8922

Republic of Georgia

- Autonomous Republic of Adjara
Evlachovaea kintrischica 7218 8058

Republic of Kazakhstan

- Beauveria bassiana* 10350

Republic of Korea

- Beauveria bassiana* 2040
- Beauveria* sp. 4853
- Cordyceps* sp. 4852
- Chungnam Province
Beauveria sp. 5697
- Gyeongbuk Province
Beauveria bassiana 7275

Gyeonggi Province

- Beauveria bassiana* 7266
- Isaria farinosa* 5699
- Unidentified / Hyphomycetes 5695
- Jeju Province
 - Beauveria bassiana* 7241 7271 7272
- Jheonnam
 - Beauveria bassiana* 7270
- Kangwon-do
 - Beauveria bassiana* 6721 7244 7247
7251 7261 7264
 - Beauveria brongniartii* 7268
 - Beauveria sungii* 5689 7279 7280
 - Isaria amoenerosea* 4849
 - Isaria farinosa* 7276
 - Isaria fumosorosea* 5694
 - Lecanicillium muscarium* 7248

Russian Federation

- Karachayev-Cherkessiya Republ
 - Beauveria brongniartii* 9452
 - Isaria farinosa* 9511
 - Lecanicillium* sp. 9459
- Krasnodarsky Krai
 - Beauveria bassiana* 9444
- Moscow Region
 - Beauveria bassiana* 9441 9449
 - Isaria coleopterorum* 9509
 - Lecanicillium* nr. *aranearium* 9460
- Primorsky Krai
 - Beauveria bassiana* 7581 9442
 - Beauveria* sp. 7580 7591
 - Clonostachys rosea* 9491
 - Cordyceps* sp. 7848
 - Engyodontium rectidentatum* 7805
 - Isaria fumosorosea* 7716
 - Polycephalomyces* sp. 9496
 - Tolypocladium cylindrosporum* 7812
- Sakhalin Region
 - Sporothrix insectorum* 9502

Solomon Islands

- Metarhizium anisopliae* sensu lato
4290 4333 4334 4335 4336 4337 4338
4339 4340 4341 4557 4558 4572 4582
- Metarhizium pingshaense* 4342 4610

Sri Lanka

- Beauveria bassiana* 7758

Switzerland

- Beauveria brongniartii* 1069
- Beauveria varroae* 2694
- Conidiobolus coronatus* 1572 1573
1574 1575
- Metarhizium anisopliae* sensu lato
1377
- Metarhizium brunneum* 1066
- Pandora blunckii* 915 917 920
- Zoophthora anglica* 396
- Bern
 - Beauveria brongniartii* 7528
- Graubünden
 - Metarhizium anisopliae* sensu lato
7524
- Lucerne
 - Beauveria bassiana* 7525 7526

Schaffhausen

- Beauveria bassiana* 1566
- Beauveria caledonica* 1567

Thurgau

- Beauveria brongniartii* 1067 1068
1070 1071 1072 1076 1077

Uri

- Metarhizium anisopliae* sensu lato
7532

Zurich

- Pandora blunckii* 1715 1716 1717 1718

Syria

- Purpureocillium lilacinum* 6110

Thailand

- Metarhizium pingshaense* 538

Togo

- Beauveria bassiana* 2688 2689 2690
2691 2692 5443 5444 5445 5446 5447
5448 5449 5450 5451 5452 5453 5454
5455 5456 5457 5458 5478 5479 5480
5481 5488 5489 5490

Turkey

- Beauveria bassiana* 10347

Gaziantep

- Beauveria bassiana* 5669 5670
- Beauveria* sp. 5678 5833
- Isaria farinosa* 5754 5834

Gümüşhane

- Beauveria bassiana* 8668

Hatay

- Beauveria bassiana* 5668
- Unidentified / Hyphomycetes 5677

Kahraman Maras

- Beauveria* sp. 5831

Trabzon

- Beauveria bassiana(?)* 9271
- Beauveria* sp. 9272

- Fusarium* sp. 9273 9274

- Isaria farinosa* 9269 9270 9275 9276
9277 9278

- Lecanicillium muscarium* 9267 9268

Uganda

- Fusarium* sp. 5879

Ukraine

- Autonomous Republic of Crimea
Simplicillium lamellicola 9479
- Kherson Oblast
 - Beauveria* sp. 7595
 - Isaria farinosa* 9516
 - Isaria fumosorosea* 9521

United Kingdom

- Beauveria bassiana* 6552 6559 6560
7764 7769 7773 7774
- Metarhizium anisopliae* sensu lato
6549 6551
- Metarhizium anisopliae* sensu stricto
6546
- Verticillium lecanii* 6545
- England
 - Beauveria bassiana* 7763
 - Zoophthora anglica* 1739

Geographical Origin

USA

Yugoslavia

USA

- Metarhizium anisopliae* sensu lato
1903
- Metarhizium robertsii* 3608
- Arkansas
 - Beauveria bassiana* 7404
 - Sorosporella uvella* 1123
- California
 - Metarhizium robertsii* 1897
- Connecticut
 - Beauveria bassiana* 6393
 - Metarhizium anisopliae* sensu lato
3713 3720 6388
 - Metarhizium brunneum* 6392 7234
8415 8416 8417 8418 8419
 - Metarhizium robertsii* 3721
 - Unidentified sp. 3722
- Delaware
 - Zoophthora phytonomi* 2188
- Florida
 - Aspergillus nidulans*(?) 6515
 - Beauveria bassiana* 412 413 416 5979
5981 5986
 - Cladosporium sphaerospermum* 6516
 - Isaria javanica* 322
 - Metarhizium pingshaense* 5197
 - Purpureocillium lilacinum* 410
 - Stilbella buquetii* 2915
 - Tilachlidium* sp. 10132
- Georgia
 - Beauveria bassiana* 336 337 2676
 - Fusarium* sp. 2568 2569
- Hawaii
 - Beauveria bassiana* 3040 8705 10471
 - Metarhizium anisopliae* sensu lato
9217 9218
- Illinois
 - Beauveria bassiana* 7152 7153 7154
 - Metarhizium anisopliae* sensu lato
7180
 - Zoophthora phytonomi* 3342 3343
3344
- Kansas
 - Beauveria bassiana* 6471
 - Metarhizium robertsii* 6472
- Kentucky
 - Beauveria bassiana* 2270
 - Beauveria brongniartii* 2271
- Maine
 - Beauveria bassiana* 252 353
- Maryland
 - Beauveria bassiana* 8998
- Massachusetts
 - Beauveria bassiana* 3037
 - Metarhizium anisopliae* sensu lato
6389
 - Penicillium* sp. 3036
 - Pochonia bulbillosa*(?) 3035
- Michigan
 - Aspergillus flavus* 6469
 - Aspergillus* sp. 6571
 - Beauveria bassiana* 2580 5813 7160
7161 7162 7163 7165 8260 8261 8262
8263 8771 8772 8773 8774
 - Beauveria* sp. 8110 8111 8112 8113
8116 8117 8119 8120 8121 8122 8123

- 8124 8125 8126 8127 8128 8129 8130
8132 8133 8134 8135 8136 8137 8138
8139 8140 8141 8143 8144 8145 8146
8147 8148 8149 8150 8151 8152 8153
8154 8156 8158 8159 8160 8161 8164
8166 8167 8168 8169 8170 8171 8172
8173 8174 8175 8176 8177 8178 8180
8181 8182 8185 8186 8187 8188
- Fusarium* sp. 8131 8266 8267
- Isaria farinosa* 9944 9945
- Isaria fumosorosea* 8142
- Lecanicillium lecanii* 7181 7182 8115
- Lecanicillium muscarium* 8114 8118
8157 8163 8165
- Lecanicillium muscarium*(?) 8162
8265
- Metarhizium robertsii* 1968
- Mucor circinelloides* 6470
- Unidentified / Hyphomycetes 8155
8179 8183 8184
- Nebraska
 - Beauveria bassiana* 3111 3112
- New Jersey
 - Fusarium* sp. 3030 3031 3032
- New York
 - Beauveria bassiana* 350 534 535 1039
1081 1619 1620 1621 1622 1623 1624
1704 1705 1706 1707 1708 1709 1710
1711 1712 1713 1721 1722 1723 1749
1750 1775 1776 1777 1778 1779 1780
1781 2030 2031 2032 2033 2034 3667
4973 4974 4975 5533 5534 5535 5536
5537 6216 6217 6391 6986 6987 6988
7158 7159 7179 8412 8413
 - Beauveria brongniartii* 6213 6214
6215
 - Erynia* sp. 5352
 - Fusarium* sp. 4825
 - Isaria farinosa* 8411
 - Metarhizium anisopliae* sensu lato
1280 2548 3330 3331 3332 3333 3334
3335 3336 3337 3338 3339 3340 4819
4820 4821 4822 4823 4824 4937 9373
9374
 - Metarhizium robertsii* 1298 1878 2547
3108 3211 4123
 - Purpureocillium lilacinum* 9371
 - Tolyphocladium inflatum* 4877 4878
4879 4880 4881 4882 4883 4884 4885
4886 4887 4888 4889 4890 4891 4892
4893 4894 4895 4896 4897 4898
 - Unidentified / Hyphomycetes 2999
 - Zoophthora phytonomi* 202
 - North Carolina
 - Metarhizium robertsii* 23
 - Oregon
 - Beauveria bassiana* 201 5997
 - Isaria farinosa* 2937
 - Metarhizium anisopliae* sensu lato
7494
 - Metarhizium brunneum* 2107
 - Rhode Island
 - Beauveria bassiana* 317 318
 - South Carolina
 - Metarhizium robertsii* 2575

South Dakota

- Beauveria bassiana* 2579

Texas

- Aspergillus* sp. 7048
- Beauveria bassiana* 3097 5465 7795
- Candida* sp. 5729
- Isaria javanica* 7119

Vermont

- Beauveria* sp. 5186
- Mixed Culture* sp. 5188
- Paecilomyces* sp. 5184 5193
- Pochonia chlamydosporia* 3314

Washington

- Beauveria bassiana* 344 1079 3386
- Metarhizium anisopliae* sensu lato
3389 7000 7001 7002 7003 7004 7005
7006 7007 7008 7009
- Metarhizium robertsii* 3388

West Virginia

- Beauveria bassiana* 7941

Uzbekistan

- Beauveria bassiana* 6055 6057 6058
6059 6061 6062 6063 6064 6074 6075
6077 6078 6092 6095 6096 6099 6111
6112 6113

Vietnam

- Beauveria bassiana* 751

West Africa

- Cape Verde Islands
- Beauveria bassiana* 4798 4799

Western Samoa

- Apia
 - Metarhizium anisopliae* var. *majus*
297 298
 - Metarhizium anisopliae* sensu stricto
2223

Yugoslavia

- Beauveria bassiana* 505 506 507 510
- Croatia
 - Beauveria bassiana* 509
- Serbia
 - Beauveria bassiana* 504

Abbott Laboratories

89-201 *Beauveria bassiana* 2695

Ahn, S.B.

E5-1 *Beauveria bassiana* 2040

Allee, Leslie

84-1 *Beauveria bassiana* 1704
84-10 *Beauveria bassiana* 1711
84-11 *Beauveria bassiana* 1712
84-12 *Beauveria bassiana* 1713
84-13 *Beauveria bassiana* 1721
84-16 *Beauveria bassiana* 1749
84-18 *Beauveria bassiana* 1750
84-19 *Beauveria bassiana* 1722
84-20 *Beauveria bassiana* 1723
84-22 *Beauveria bassiana* 1775
84-23 *Beauveria bassiana* 1776
84-24 *Beauveria bassiana* 1777
84-25 *Beauveria bassiana* 1778
84-26 *Beauveria bassiana* 1779
84-27 *Beauveria bassiana* 1780
84-28 *Beauveria bassiana* 1781
84-3 *Beauveria bassiana* 1705
84-4 *Beauveria bassiana* 1706
84-5 *Beauveria bassiana* 1707
84-7 *Beauveria bassiana* 1708
84-8 *Beauveria bassiana* 1709
84-9 *Beauveria bassiana* 1710

Alves, Sergio Batista

252 *Beauveria bassiana* 1480
267 *Beauveria bassiana* 1833
290 *Beauveria bassiana* 2559
290 *Beauveria bassiana* 2638
292 *Beauveria bassiana* 2639
295 *Beauveria* sp. 1835
61 *Beauveria bassiana* 1483
695 *Beauveria bassiana* 2642

Aoki, Joji

Beau. 22 *Beauveria brongniartii* 985
Isa. 1 *Beauveria bassiana* 1041
Met. 6 *Metarhizium robertsii* 1046
Paec. 1 *Mixed Culture* sp. 1043
Paec. 6 *Paecilomyces canadensis* 984

ARSEF

?1377 *Zoophthora anglica* 396
?396 *Metarhizium anisopliae* sensu lato
1377
?397 *Metarhizium brunneum* 1066
1184 *Metarhizium flavoviride* 2024
1451 (deaccessioned) *Beauveria bassiana*
1971
1452 (deaccessioned) *Metarhizium anisopliae* sensu lato 1989
1667 (deaccessioned) Unidentified sp.
1634
2024 *Metarhizium flavoviride* var.
flavoviride 1184
2210 Unidentified / Hyphomycetes 2225
2225 *Metarhizium brunneum* 2210
2379 (never frozen) *Isaria farinosa* 2355
252 *Beauveria bassiana* 5286
2547 *Metarhizium robertsii* 4123
2559 *Beauveria bassiana* 2638
2575 *Metarhizium robertsii* 3608

2638 *Beauveria bassiana* 2559

2662 (deaccessioned) *Erynia* sp. 2553
7453 *Metarhizium lepidiotae* 7488
7488 *Metarhizium anisopliae* var. *lepidiotae* 7453
82 (lost) *Zoophthora phytonomi* 113

ATCC

200994 *Tolyphocladium inflatum* 4884
26156 *Beauveria brongniartii* 617
32804 *Hirsutella fusiformis* 5474
34178 *Ophiocordyceps aphodii* 5498
34292 *Zoophthora phytonomi* 113
44767 *Synnematium jonesii* 5664
74040 *Beauveria bassiana* 7795
MYA-3093 *Metarhizium robertsii* 2575

Balazy, Stanislaw

1431 *Polycephalomyces formosus* 1424
1539 *Lecanicillium muscarium* 1335

Bauer, Leah S.

2UIC1817 *Aspergillus flavus* 6469
2UIC2463 *Mucor circinelloides* 6470
Legg Park 1 *Isaria farinosa* 9944
Legg Park 2 *Isaria farinosa* 9945

Bernal, M.C. Hugo Cesar Arredondo

BbGC1 *Beauveria bassiana* 5740
BbGC11 *Beauveria bassiana* 5745
BbGC2 *Beauveria bassiana* 5741
BbGC5 *Beauveria bassiana* 5742
BbGC8 *Beauveria bassiana* 5743
BbGC9 *Beauveria bassiana* 5744

Borisov, Boris A.

B.B. 2 *Evlachovaea kintrischica* 7218
B.B. 2 *Evlachovaea kintrischica* 8058

Brito, Jorge

14A *Beauveria bassiana* 4799
7A *Beauveria bassiana* 4798

Broadbent,A. Bruce

BB001 *Beauveria bassiana* 5807

CAAS

4pl *Beauveria brongniartii* 4381
93.1 *Beauveria bassiana* 4382
CZN.9301 *Beauveria brongniartii* 4380

Castrillo, Louela A.

APMI1 *Beauveria bassiana* 8771
APMI2 *Beauveria bassiana* 8772
APMI3 *Beauveria bassiana* 8773
APMI4 *Beauveria bassiana* 8774
NY-1 *Beauveria bassiana* 6986
NY-11 *Beauveria bassiana* 6988
NY-5 *Beauveria bassiana* 6987

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1 *Beauveria bassiana* 3437
10 *Beauveria bassiana* 3446
11 *Beauveria bassiana* 3447
12 *Beauveria bassiana* 3448
14 *Beauveria bassiana* 3450
15 *Beauveria bassiana* 3451
16 *Beauveria bassiana* 3452
17 *Beauveria bassiana* 3453
19 *Beauveria bassiana* 3455
2 Beauveria bassiana 3438
21 *Beauveria bassiana* 3457
3 *Beauveria bassiana* 3439
4 *Beauveria bassiana* 3440
5 *Beauveria bassiana* 3441
6 *Beauveria bassiana* 3442
7 *Beauveria bassiana* 3443
8 *Beauveria bassiana* 3444
9 *Beauveria bassiana* 3445

CBS

118231 *Lecanicillium pissodis* 8057
150.47 *Ophiocordyceps aphodii* 5498
205.33 *Hirsutella fusiformis* 5474
305.95 *Tolyphocladium inflatum* 4884
316.51 *Metarhizium brunneum* 2107
316.51 *Metarhizium anisopliae* sensu lato 7494
326.67 *Beauveria brongniartii* 7761
511.88 *Stilbella buquetii* 2915
700.74 *Metarhizium flavoviride* var. *flavoviride* 1184
700.74 *Metarhizium flavoviride* 2024

CCFC

006988 *Tolyphocladium inflatum* 4884

CENARGEN

CG 123 *Isaria fumosorosea* 2956
CG 162 *Isaria amoenerosea* 2958
CG 163 *Isaria amoenerosea* 2959
CG 164 *Isaria amoenerosea* 2960
CG 165 *Beauveria bassiana* 2961
CG 301 *Purpureocillium lilacinum* 1951
CG 304 Unidentified sp. 3471
CG 311 Unidentified sp. 3478
CG 339 *Metarhizium anisopliae* sensu lato 3479
CG 639 Unidentified / Hyphomycetes 8641

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Bb 9024 *Beauveria bassiana* 9184

CEP

059 *Beauveria bassiana* 7202
061 *Beauveria* sp. 7463
075 *Beauveria bassiana* 7466
083 *Beauveria bassiana* 7470
092 *Beauveria bassiana* 7471
112 *Beauveria bassiana* 8520
113 *Beauveria bassiana* 8521
114 *Beauveria bassiana* 8522
116 *Beauveria bassiana* 8523
117 *Beauveria bassiana* 8524
118 *Beauveria bassiana* 8525
119 *Beauveria bassiana* 8526
138 *Beauveria bassiana* 8461

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141 <i>Beauveria bassiana</i> 8530	82-6-28-01 <i>Beauveria bassiana</i> 809	CNPS
147 <i>Beauveria bassiana</i> 8372	82-7-23-01 <i>Metarhizium anisopliae</i> sensu lato 808	25 <i>Metarhizium anisopliae</i> sensu lato 1056
148 <i>Beauveria bassiana</i> 8462	83-01-06A (CB 97) <i>Beauveria bassiana</i> 958	31 <i>Beauveria bassiana</i> 1060
149 <i>Beauveria bassiana</i> 8463	83-03-15-M <i>Beauveria bassiana</i> 947	32 <i>Beauveria bassiana</i> 1061
150 <i>Beauveria bassiana</i> 8373	83-03-15-O <i>Beauveria bassiana</i> 948	Cortez Madrigal, Hipolito
175 <i>Beauveria bassiana</i> 8464	83-03-15-P <i>Beauveria bassiana</i> 949	B1 <i>Beauveria bassiana</i> (?) 6890
Chandler, David	83-03-15-Q <i>Beauveria bassiana</i> 950	B2 <i>Beauveria bassiana</i> (?) 6891
HRI 189.83 <i>Metarhizium anisopliae</i> sensu lato 6549	83-03-15B <i>Beauveria bassiana</i> 951	CP
HRI 33.79 <i>Verticillium lecanii</i> 6545	83-03-15E <i>Beauveria bassiana</i> 946	10 <i>Beauveria bassiana</i> 736
HRI 335.92 <i>Metarhizium anisopliae</i> sensu lato 6551	83-03-15H <i>Beauveria bassiana</i> 952	101 <i>Beauveria bassiana</i> 956
HRI 342.92 <i>Beauveria bassiana</i> 6552	83-03-16C <i>Beauveria bassiana</i> 941	104 <i>Beauveria bassiana</i> 958
HRI 36.79 <i>Metarhizium anisopliae</i> sensu stricto 6546	83-03-16D <i>Beauveria bassiana</i> 942	124 <i>Beauveria bassiana</i> 1971
HRI 386.93 <i>Beauveria bassiana</i> 6559	83-03-16E <i>Beauveria bassiana</i> 943	125 <i>Beauveria bassiana</i> 1450
HRI 397.93 <i>Beauveria bassiana</i> 6560	83-03-16K <i>Beauveria bassiana</i> 953	126 <i>Metarhizium anisopliae</i> sensu lato 1989
CIAT	83-03-16L <i>Metarhizium anisopliae</i> sensu lato 954	14 <i>Beauveria bassiana</i> 735
301 <i>Evlachovaea</i> sp. 7551	83-03-17B <i>Beauveria bassiana</i> 982	143 <i>Beauveria bassiana</i> 1453
CMPPB	83-1-25-01 <i>Beauveria bassiana</i> 934	144 <i>Beauveria bassiana</i> 1454
150 <i>Evlachovaea kintrischica</i> 7218	83-3-3-01 <i>Beauveria bassiana</i> 937	145 <i>Beauveria bassiana</i> 1455
150 <i>Evlachovaea kintrischica</i> 8058	83-3-3-02 <i>Beauveria bassiana</i> 938	146 <i>Beauveria bassiana</i> 1456
CNPAF	83-3-3-03 <i>Metarhizium anisopliae</i> sensu lato 939	148 <i>Beauveria bassiana</i> 1458
52 <i>Beauveria bassiana</i> 1450	83-5-27 <i>Beauveria bassiana</i> 956	149 <i>Beauveria bassiana</i> 1459
53 <i>Metarhizium anisopliae</i> sensu lato 1989	84-02-30-2 <i>Beauveria bassiana</i> 1453	150 <i>Beauveria bassiana</i> 1460
81-11-25-04 <i>Beauveria bassiana</i> 756	84-03-28-1E <i>Beauveria bassiana</i> 1458	151 <i>Beauveria bassiana</i> 1461
81-11-25-05 <i>Beauveria bassiana</i> 731	84-03-28-1F <i>Beauveria bassiana</i> 1454	152 <i>Beauveria bassiana</i> 1462
81-11-25-07 <i>Beauveria bassiana</i> 732	84-03-28-1G <i>Beauveria bassiana</i> 1462	153 <i>Beauveria bassiana</i> 1463
82-07-27-01 <i>Beauveria bassiana</i> 928	84-03-28-1L <i>Beauveria bassiana</i> 1463	154 <i>Beauveria bassiana</i> 1464
82-1-15-02 <i>Beauveria bassiana</i> 735	84-03-28-D <i>Beauveria bassiana</i> 1455	155 <i>Beauveria bassiana</i> 1465
82-1-15-05 <i>Isaria fumosorosea</i> 722	84-03-29-1 <i>Beauveria bassiana</i> 1461	156 <i>Beauveria bassiana</i> 1466
82-1-15-06 <i>Isaria amoenerosea</i> 741	84-03-31-2 <i>Beauveria bassiana</i> 1469	157 <i>Beauveria bassiana</i> 1467
82-1-6-01 <i>Beauveria bassiana</i> 733	84-03-31-6 <i>Beauveria bassiana</i> 1466	159 <i>Beauveria bassiana</i> 1469
82-1-6-02 <i>Metarhizium anisopliae</i> sensu lato 725	84-04-02-1B <i>Beauveria bassiana</i> 1473	160 <i>Beauveria bassiana</i> 1470
82-1-6-03 <i>Beauveria bassiana</i> 734	84-04-02-2 <i>Beauveria bassiana</i> 1472	161 <i>Beauveria bassiana</i> 1471
82-1-6-04 <i>Beauveria bassiana</i> 736	84-04-02-3 <i>Beauveria bassiana</i> 1470	162 <i>Beauveria bassiana</i> 1472
82-1-6-10 <i>Purpureocillium lilacinum</i> 723	84-04-02-4 <i>Beauveria bassiana</i> 1471	163 <i>Beauveria bassiana</i> 1473
82-12-15-01 <i>Metarhizium anisopliae</i> sensu lato 929	84-04-02-5A <i>Beauveria bassiana</i> 1467	165 <i>Beauveria bassiana</i> 1475
82-12-15-02 <i>Beauveria bassiana</i> 930	84-04-03-1A <i>Beauveria bassiana</i> 1465	166 <i>Beauveria bassiana</i> 1476
82-12-20-01 <i>Beauveria bassiana</i> 931	84-04-03-1B <i>Beauveria bassiana</i> 1460	168 <i>Beauveria bassiana</i> 1966
82-12-20-02 <i>Metarhizium anisopliae</i> sensu lato 932	84-04-03-1C <i>Beauveria bassiana</i> 1475	17 <i>Purpureocillium lilacinum</i> 723
82-2-15-01 <i>Beauveria bassiana</i> 752	84-04-03-1E <i>Beauveria bassiana</i> 1459	174 <i>Metarhizium anisopliae</i> sensu lato 1885
82-2-15-03 <i>Metarhizium anisopliae</i> sensu lato 760	84-04-03-6A <i>Beauveria bassiana</i> 1456	176 <i>Purpureocillium lilacinum</i> 1951
82-2-15-04 <i>Metarhizium robertsii</i> 724	84-04-03-6B <i>Beauveria bassiana</i> 1464	179 <i>Beauveria bassiana</i> 1954
82-2-15-05 <i>Isaria amoenerosea</i> 744	84-04-25-1 <i>Beauveria bassiana</i> 1476	18 <i>Isaria fumosorosea</i> 722
82-2-3-01 <i>Beauveria bassiana</i> 739	84-3-12 <i>Beauveria bassiana</i> 1971	181 <i>Beauveria bassiana</i> 1956
82-2-9-01 <i>Beauveria bassiana</i> 738	85-05-02 <i>Purpureocillium lilacinum</i> 1951	182 <i>Isaria farinosa</i> 1957
82-3-1-03 <i>Beauveria bassiana</i> 758	85-7-22 <i>Beauveria bassiana</i> 1956	183 <i>Beauveria bassiana</i> 2075
82-3-23-01 <i>Beauveria bassiana</i> 757	85-7-22-1 <i>Isaria farinosa</i> 1957	184 <i>Metarhizium anisopliae</i> sensu lato 1958
82-3-24-01 <i>Beauveria bassiana</i> 753	85-7-23-1 <i>Beauveria bassiana</i> 1954	187 <i>Beauveria bassiana</i> 1961
82-4-29-01 <i>Beauveria bassiana</i> 785	85-7-24 <i>Beauveria bassiana</i> 2075	19 <i>Isaria amoenerosea</i> 741
82-4-30-01C <i>Beauveria bassiana</i> 784	85-7-24-1 <i>Metarhizium anisopliae</i> sensu lato 1958	194 <i>Metarhizium anisopliae</i> sensu lato 2076
82-4-30-01D <i>Beauveria bassiana</i> 804	85-7-24-4 <i>Beauveria bassiana</i> 1961	195 <i>Metarhizium anisopliae</i> sensu lato 2077
82-4-4-01 <i>Beauveria bassiana</i> 754	86-06-02-2 <i>Isaria fumosorosea</i> 2217	198 <i>Beauveria bassiana</i> 2079
82-5-3-01 <i>Beauveria bassiana</i> 805	86-06-05-1 <i>Isaria fumosorosea</i> 2216	212 <i>Isaria fumosorosea</i> 2216
82-5-3-03A <i>Beauveria bassiana</i> 788	86-06-05-1 <i>Isaria fumosorosea</i> 2221	213 <i>Isaria fumosorosea</i> 2217
82-5-3-03B <i>Beauveria bassiana</i> 786	86-06-05-3 <i>Isaria fumosorosea</i> 2219	214 <i>Pochonia chlamydosporia</i> var. <i>chlamydosporia</i> 2218
82-5-6-01 <i>Beauveria bassiana</i> 787	86-06-05-4 <i>Isaria amoenerosea</i> 2220	215 <i>Isaria fumosorosea</i> 2219
82-5-6-02 <i>Beauveria bassiana</i> 783	86-06-05-6 <i>Pochonia chlamydosporia</i> var. <i>chlamydosporia</i> 2218	216 <i>Isaria amoenerosea</i> 2220
	88-5-6 <i>Beauveria bassiana</i> 2625	217 <i>Isaria fumosorosea</i> 2221
	88-5-6A <i>Beauveria bassiana</i> 2626	221 <i>Beauveria bassiana</i> 2511
	88-5-6B <i>Metarhizium anisopliae</i> sensu lato 2635	

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|---|--|-----------|
| <p>222 <i>Beauveria bassiana</i> 2520
 224 <i>Metarhizium anisopliae</i> sensu stricto
 2518
 227 <i>Beauveria bassiana</i> 2515
 229 <i>Beauveria bassiana</i> 2509
 23 <i>Beauveria bassiana</i> 738
 230 <i>Beauveria bassiana</i> 2559
 230 <i>Beauveria bassiana</i> 2638
 236A <i>Metarhizium anisopliae</i> sensu lato
 2513
 236B <i>Metarhizium robertsii</i> 2514
 237 <i>Beauveria bassiana</i> 2512
 240 <i>Beauveria bassiana</i> 2625
 241 <i>Beauveria bassiana</i> 2626
 25 <i>Metarhizium robertsii</i> 724
 253 <i>Metarhizium anisopliae</i> sensu lato
 2635
 26 <i>Isaria amoenerosea</i> 744
 27 <i>Beauveria bassiana</i> 739
 270 <i>Beauveria bassiana</i> 2938
 272 <i>Metarhizium anisopliae</i> sensu lato
 2941
 273 <i>Purpureocillium lilacinum</i> 2952
 274 <i>Beauveria bassiana</i> 2942
 278 <i>Penicillium</i> sp. 2950
 281 <i>Beauveria bassiana</i> 2946
 29 <i>Beauveria bassiana</i> 758
 290 <i>Beauveria bassiana</i> 2945
 31 <i>Metarhizium anisopliae</i> sensu lato
 760
 34 <i>Beauveria bassiana</i> 752
 35 <i>Beauveria bassiana</i> 757
 36 <i>Beauveria bassiana</i> 753
 38 <i>Beauveria bassiana</i> 754
 4 <i>Beauveria bassiana</i> 756
 46 <i>Beauveria bassiana</i> 785
 47 <i>Beauveria bassiana</i> 784
 478(479?) <i>Beauveria bassiana</i> 3219
 48 <i>Beauveria bassiana</i> 804
 49 <i>Beauveria bassiana</i> 805
 5 <i>Beauveria bassiana</i> 731
 50 <i>Beauveria bassiana</i> 788
 51 <i>Beauveria bassiana</i> 786
 58 <i>Beauveria bassiana</i> 787
 59 <i>Beauveria bassiana</i> 783
 6 <i>Beauveria bassiana</i> 732
 61 <i>Beauveria bassiana</i> 809
 62 <i>Metarhizium anisopliae</i> sensu lato
 808
 63 <i>Beauveria bassiana</i> 928
 67 <i>Metarhizium anisopliae</i> sensu lato
 929
 68 <i>Beauveria bassiana</i> 930
 69 <i>Beauveria bassiana</i> 931
 7 <i>Beauveria bassiana</i> 733
 70 <i>Metarhizium anisopliae</i> sensu lato
 932
 72 <i>Beauveria bassiana</i> 934
 76 <i>Beauveria bassiana</i> 937
 77 <i>Beauveria bassiana</i> 938
 78 <i>Metarhizium anisopliae</i> sensu lato
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 8 <i>Metarhizium anisopliae</i> sensu lato 725
 82 <i>Beauveria bassiana</i> 941
 83 <i>Beauveria bassiana</i> 942
 84 <i>Beauveria bassiana</i> 943</p> <p>87 <i>Beauveria bassiana</i> 946
 88 <i>Beauveria bassiana</i> 947
 89 <i>Beauveria bassiana</i> 948
 9 <i>Beauveria bassiana</i> 734
 90 <i>Beauveria bassiana</i> 949
 91 <i>Beauveria bassiana</i> 950
 92 <i>Beauveria bassiana</i> 951
 93 <i>Beauveria bassiana</i> 952
 95 <i>Beauveria bassiana</i> 982
 98 <i>Beauveria bassiana</i> 953
 99 <i>Metarhizium anisopliae</i> sensu lato
 954</p> <p>CRI
 35-79 <i>Metarhizium brunneum</i> 4228</p> <p>CSIRO</p> <p>FI-0001 <i>Beauveria bassiana</i> 7813
 FI-0012 <i>Metarhizium anisopliae</i> sensu
 lato 8492
 FI-0014 <i>Metarhizium anisopliae</i> sensu
 lato 7814
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 lato 8495
 FI-0024 <i>Metarhizium anisopliae</i> sensu
 lato 7845
 FI-0038 <i>Metarhizium anisopliae</i> sensu
 lato 7815
 FI-0083 <i>Metarhizium anisopliae</i> sensu
 lato 7816
 FI-0111 <i>Metarhizium anisopliae</i> sensu
 lato 7819
 FI-0114 <i>Metarhizium pingshaense</i> 7410
 FI-0126 <i>Metarhizium anisopliae</i> sensu
 lato 7824
 FI-0143 <i>Metarhizium anisopliae</i> sensu
 lato 7825
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 lato 7826
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 <i>lepidiota</i> 8732
 FI-0148 <i>Metarhizium anisopliae</i> sensu
 lato 7827
 FI-0149 <i>Metarhizium anisopliae</i> sensu
 lato 7846
 FI-0150 <i>Metarhizium anisopliae</i> sensu
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 lato 7411
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 lato 8733
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 lato 7829
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 lato 7830
 FI-0160 <i>Metarhizium anisopliae</i> sensu
 lato 7831
 FI-0165 <i>Metarhizium anisopliae</i> sensu
 lato 7832
 FI-0190 <i>Metarhizium anisopliae</i> sensu
 lato 7854
 FI-0191 <i>Metarhizium anisopliae</i> sensu
 lato 7839
 FI-0205 <i>Metarhizium anisopliae</i> sensu
 lato 7842</p> <p>FI-0210 <i>Beauveria bassiana</i> 7853
 FI-0211 <i>Metarhizium anisopliae</i> sensu
 lato 7863
 FI-0214 <i>Metarhizium anisopliae</i> sensu
 lato 7864
 FI-0218 <i>Metarhizium anisopliae</i> sensu
 lato 7865
 FI-0295 <i>Metarhizium pingshaense</i> 7417
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 FI-0377 <i>Metarhizium anisopliae</i> sensu
 lato 7931
 FI-0378 <i>Metarhizium anisopliae</i> sensu
 lato 7932
 FI-0380 <i>Metarhizium anisopliae</i> sensu
 lato 7933
 FI-0381 <i>Metarhizium anisopliae</i> sensu
 lato 7934
 FI-0382 <i>Metarhizium anisopliae</i> sensu
 lato 7935
 FI-0383 <i>Metarhizium anisopliae</i> sensu
 lato 7936
 FI-0396 <i>Metarhizium anisopliae</i> sensu
 lato 8499
 FI-0454 <i>Metarhizium anisopliae</i> sensu
 lato 8734
 FI-0522 <i>Metarhizium anisopliae</i> sensu
 lato 8500
 FI-0529 <i>Metarhizium anisopliae</i> sensu
 lato 8501
 FI-0570 <i>Beauveria bassiana</i> 8065
 FI-0658 <i>Metarhizium anisopliae</i> sensu
 lato 8098
 FI-0659 <i>Metarhizium anisopliae</i> sensu
 lato 8099
 FI-0700 <i>Metarhizium pingshaense</i> 7435
 FI-0701 <i>Beauveria bassiana</i> 8077
 FI-0703 <i>Beauveria bassiana</i> 8078
 FI-0705 <i>Beauveria bassiana</i> 8079
 FI-0804 <i>Metarhizium anisopliae</i> sensu
 lato 8543
 FI-0805 <i>Metarhizium anisopliae</i> sensu
 lato 8544
 FI-0806 <i>Metarhizium anisopliae</i> sensu
 lato 8545
 FI-0807 <i>Metarhizium anisopliae</i> sensu
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 lato 8547
 FI-0809 <i>Metarhizium anisopliae</i> sensu
 lato 8548
 FI-0810 <i>Metarhizium anisopliae</i> sensu
 lato 8549
 FI-0811 <i>Metarhizium anisopliae</i> sensu
 lato 8550
 FI-0812 <i>Metarhizium anisopliae</i> sensu
 lato 8551
 FI-0814 <i>Metarhizium anisopliae</i> sensu
 lato 8552
 FI-0815 <i>Metarhizium anisopliae</i> sensu
 lato 8553
 FI-0816 <i>Metarhizium anisopliae</i> sensu
 lato 8554
 FI-0817 <i>Metarhizium anisopliae</i> sensu
 lato 8555
 FI-0818 <i>Metarhizium anisopliae</i> sensu
 lato 8556</p> | | <p>72</p> |
|---|--|-----------|

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FI-0819 <i>Metarhizium anisopliae</i> sensu lato 8557	FI-1012 <i>Metarhizium anisopliae</i> sensu lato 8743	FI-1314 <i>Metarhizium anisopliae</i> sensu lato 8845
FI-0821 <i>Metarhizium anisopliae</i> sensu lato 8559	FI-1040 <i>Metarhizium anisopliae</i> sensu lato 8744	FI-1316 <i>Metarhizium anisopliae</i> sensu lato 8847
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Ma-181 *Metarhizium anisopliae* sensu lato 3148
Ma-51 *Metarhizium anisopliae* var. *magjus* 3145
Mf-88 *Metarhizium flavoviride* var. *flavoviride* 1184
Mf-88 *Metarhizium flavoviride* 2024
- JABB of the Carolinas Inc.**
NC2 *Beauveria bassiana* 7941
- Jones, Wendy E.**
SHB *Beauveria bassiana* 3040
- Keller, Siegfried**
117 *Beauveria brongniartii* 1067
118 *Beauveria brongniartii* 1068
119 *Beauveria brongniartii* 1069
120 *Beauveria brongniartii* 1070
125 *Beauveria brongniartii* 1071
126 *Beauveria brongniartii* 1072
131 *Beauveria brongniartii* 1076
134 *Beauveria brongniartii* 1077
425 *Pandora blunckii* 917
426 *Pandora blunckii* 915
430 *Pandora blunckii* 920
48 *Zoophthora anglica* 396
48 *Metarhizium anisopliae* sensu lato 1377
490 *Conidiobolus coronatus* 1572
491 *Conidiobolus coronatus* 1573
493 *Conidiobolus coronatus* 1574
494 *Conidiobolus coronatus* 1575
500 *Metarhizium anisopliae* sensu lato 7532
514 *Pandora blunckii* 1715
515 *Pandora blunckii* 1716
516 *Pandora blunckii* 1717
517 *Pandora blunckii* 1718
714 *Metarhizium anisopliae* sensu lato 7524
727 *Beauveria bassiana* 7525
728 *Beauveria bassiana* 7526
800 *Metarhizium anisopliae* sensu lato 7527
812 *Beauveria brongniartii* 7528
885 *Metarhizium anisopliae* sensu lato 7529
92 *Metarhizium brunneum* 1066
D155 *Beauveria bassiana* 1566
D156 *Beauveria caledonica* 1567
Ma52(S4) *Metarhizium robertsii* 1910
- Kenneth, Robert G.**
3 *Conidiobolus osmodes* 79
3080 *Conidiobolus osmodes* 79
3081 *Conidiobolus* sp. 80
3082 *Conidiobolus* sp. 81
3085 *Zoophthora phytonomi* 113
3095 *Zoophthora phytonomi* 191
3133 *Zoophthora phytonomi* 192
3178 *Zoophthora phytonomi* 202
C.o. 10 *Conidiobolus* sp. 81
C.o. 15 *Conidiobolus* sp. 80
E.p. 2 *Zoophthora phytonomi* 191
- King, Brian C.**
52 *Beauveria bassiana* 7972
77 *Beauveria bassiana* 7978
- Klingen, Ingeborg**
HAG.99 *Metarhizium brunneum* 6477
NCRI 2/01/Bb *Beauveria bassiana* 6900
NCRI 2/01/Ma *Metarhizium anisopliae* sensu lato 6901
- Kope, Harry H.**
PFC 10 *Lecanicillium muscarium* 8051
PFC 11 *Lecanicillium muscarium* 8052
PFC 12 *Lecanicillium muscarium* 8053
PFC 15 *Lecanicillium muscarium* 8054
PFC 17 *Lecanicillium pissodis* 8055
PFC 18 *Lecanicillium pissodis* 8056
PFC 19 *Lecanicillium pissodis* 8057
PFC 5 *Lecanicillium muscarium* 8048
PFC 6 *Lecanicillium muscarium* 8049
PFC 9 *Lecanicillium muscarium* 8050
- Krueger, Steve V.**
MaEC1 *Metarhizium robertsii* 3108
MaEC2 *Metarhizium robertsii* 3211
MaJB1 *Metarhizium anisopliae* sensu lato 3330
MaJB10 *Metarhizium anisopliae* sensu lato 3337
MaJB11 *Metarhizium anisopliae* sensu lato 3338
MaJB12 *Metarhizium anisopliae* sensu lato 3339
MaJB13 *Metarhizium anisopliae* sensu lato 3340
MaJB2 *Metarhizium anisopliae* sensu lato 3331
MaJB3 *Metarhizium anisopliae* sensu lato 3332
MaJB6 *Metarhizium anisopliae* sensu lato 3333
MaJB7 *Metarhizium anisopliae* sensu lato 3334
MaJB8 *Metarhizium anisopliae* sensu lato 3335
MaJB9 *Metarhizium anisopliae* sensu lato 3336
MF-Ec Unidentified / Hyphomycetes 2999

Alternate Collections

Lacey, Lawrence A.
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- 92140 Unidentified sp. 3841
- 92141 *Metarhizium brunneum* 3864
- 93017 Unidentified sp. 3980
- 93038 *Beauveria bassiana* 4001
- 94007 *Isaria amoenerosea* 4097
- 94127 *Beauveria brongniartii* 4458
- 94131 *Beauveria brongniartii* 4389
- 94132 *Beauveria* sp. 4390
- 94133 *Beauveria* sp. 4391
- 94134 *Beauveria* sp. 4392
- 94135 *Beauveria asiatica* 4384
- 94136 *Beauveria brongniartii* 4385
- 94137 *Beauveria brongniartii* 4386
- 94138 Mixed Culture sp. 4387
- 94139 *Beauveria brongniartii* 4388
- 94140 *Beauveria bassiana* 4382
- 94141 *Beauveria brongniartii* 4380
- 94142 *Beauveria brongniartii* 4381
- 94143 *Beauveria brongniartii* 4465
- 94144 *Beauveria brongniartii* 4466
- 94145 *Beauveria brongniartii* 4467
- 94146 *Beauveria brongniartii* 4468
- 94147 *Beauveria brongniartii* 4469
- 94148 *Beauveria brongniartii* 4470
- 94149 *Beauveria brongniartii* 4471
- 94150 *Beauveria brongniartii* 4472
- 94151 *Beauveria brongniartii* 4473
- 94152 *Beauveria asiatica* 4474
- 94153 *Beauveria brongniartii* 4475
- 94154 *Beauveria brongniartii* 4476
- 94155 *Beauveria brongniartii* 4477
- 94156 *Beauveria brongniartii* 4478
- 95009 *Metarhizium anisopliae* sensu lato
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- 95010 *Metarhizium anisopliae* sensu lato
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- 95011 *Beauveria* sp. 4909
- 95012 *Beauveria* sp. 4910
- 95013 *Beauveria* sp. 4911
- 95014 *Beauveria* sp. 4912
- 95015 *Beauveria* sp. 4913
- 95016 *Beauveria* sp. 4914
- 95017 *Beauveria* sp. 4915
- 95018 *Beauveria* sp. 4916
- 95019 *Beauveria* sp. 4917
- 95020 *Beauveria* sp. 4918
- 95035 *Beauveria pseudobassiana* 4933
- 95048 *Beauveria amorpha* 4990
- 95050 *Beauveria brongniartii* 4992
- 95052 *Beauveria brongniartii* 4993
- 95053 *Beauveria brongniartii* 4994
- 95054 *Beauveria brongniartii* 4995
- 95062 *Beauveria bassiana* 5070
- 95063 *Beauveria bassiana* 5071
- 95064 *Beauveria bassiana* 5072
- 95065 *Isaria farinosa* 5073
- 95066 *Isaria farinosa* 5074
- 95067 *Isaria farinosa* 5075
- 95069 *Isaria farinosa* 5080
- 96001 Unidentified / Hyphomycetes
5223
- 96002 Unidentified / Hyphomycetes
5224
- 96003 Unidentified / Hyphomycetes
5225

LeBrun, Roger A.

- 96004 Unidentified / Hyphomycetes
5226
- 96005 Unidentified / Hyphomycetes
5227
- 96015 *Beauveria brongniartii* 5355
- 96016 *Beauveria brongniartii* 5356
- 96017 *Beauveria brongniartii* 5357
- 96018 *Beauveria brongniartii* 5358
- 96019 *Beauveria brongniartii* 5359
- 96020 *Beauveria brongniartii* 5360
- 96021 *Beauveria brongniartii* 5361
- 96022 *Beauveria brongniartii* 5362
- 96023 *Beauveria brongniartii* 5363
- 96024 *Beauveria brongniartii* 5364
- YARL 011219-10 *Metarhizium anisopliae* sensu lato 7006
- YARL 011219-11 *Metarhizium anisopliae* sensu lato 7007
- YARL 011219-14 *Metarhizium anisopliae* sensu lato 7008
- YARL 011219-15 *Metarhizium anisopliae* sensu lato 7009
- YARL 011219-7 *Metarhizium anisopliae* sensu lato 7004
- YARL 011219-9 *Metarhizium anisopliae* sensu lato 7005
- YARL 020128-1 *Metarhizium anisopliae* sensu lato 7000
- YARL 020128-2 *Metarhizium anisopliae* sensu lato 7001
- YARL 020128-3 *Metarhizium anisopliae* sensu lato 7002
- YARL 020128-4 *Metarhizium anisopliae* sensu lato 7003

Liu, Houping

- MF-101 *Beauveria* sp. 8110
- MF-102 *Beauveria* sp. 8111
- MF-201 *Beauveria* sp. 8112
- MF-202 *Beauveria* sp. 8113
- MF-203 *Lecanicillium muscarium* 8114
- MF-204 *Lecanicillium lecanii* 8115
- MF-205 *Beauveria* sp. 8116
- MF-206 *Beauveria* sp. 8117
- MF-208 *Lecanicillium muscarium* 8118
- MF-209 *Beauveria* sp. 8119
- MF-210 *Beauveria* sp. 8120
- MF-211 *Beauveria* sp. 8121
- MF-212 *Beauveria* sp. 8122
- MF-213 *Beauveria* sp. 8123
- MF-214 *Beauveria* sp. 8124
- MF-215 *Beauveria* sp. 8125
- MF-216 *Beauveria* sp. 8126
- MF-217 *Beauveria* sp. 8127
- MF-218 *Beauveria* sp. 8128
- MF-219 *Beauveria* sp. 8129
- MF-220 *Beauveria* sp. 8130
- MF-221 *Fusarium* sp. 8131
- MF-222 *Beauveria* sp. 8132
- MF-223 *Beauveria* sp. 8133
- MF-224 *Beauveria* sp. 8134
- MF-225 *Beauveria* sp. 8135
- MF-226 *Beauveria* sp. 8136
- MF-227 *Beauveria* sp. 8137
- MF-228 *Beauveria* sp. 8138
- MF-229 *Beauveria* sp. 8139
- MF-231 *Beauveria* sp. 8140
- MF-232 *Beauveria* sp. 8141
- MF-233 *Isaria fumosorosea* 8142
- MF-234 *Beauveria* sp. 8143
- MF-235 *Beauveria* sp. 8144
- MF-236 *Beauveria* sp. 8145
- MF-237 *Beauveria* sp. 8146
- MF-238 *Beauveria* sp. 8147
- MF-239 *Beauveria* sp. 8148
- MF-240 *Beauveria* sp. 8149
- MF-241 *Beauveria* sp. 8150
- MF-242 *Beauveria* sp. 8151
- MF-243 *Beauveria* sp. 8152
- MF-244 *Beauveria* sp. 8153
- MF-245 *Beauveria* sp. 8154
- MF-246 Unidentified / Hyphomycetes
8155
- MF-247 *Beauveria* sp. 8156
- MF-248 *Lecanicillium muscarium* 8157
- MF-249 *Beauveria* sp. 8158
- MF-250 *Beauveria* sp. 8159
- MF-251 *Beauveria* sp. 8160
- MF-252 *Beauveria* sp. 8161
- MF-253 *Lecanicillium muscarium(?)*
8162
- MF-254 *Lecanicillium muscarium* 8163
- MF-255 *Beauveria* sp. 8164
- MF-257 *Lecanicillium muscarium* 8165
- MF-258 *Beauveria* sp. 8166
- MF-259 *Beauveria* sp. 8167
- MF-260 *Beauveria* sp. 8168
- MF-261 *Beauveria* sp. 8169
- MF-263 *Beauveria* sp. 8170
- MF-264 *Beauveria* sp. 8171
- MF-265 *Beauveria* sp. 8172
- MF-266 *Beauveria* sp. 8173
- MF-267 *Beauveria* sp. 8174
- MF-268 *Beauveria* sp. 8175
- MF-270 *Beauveria* sp. 8176
- MF-271 *Beauveria* sp. 8177
- MF-272 *Beauveria* sp. 8178
- MF-273 Unidentified / Hyphomycetes
8179
- MF-274 *Beauveria* sp. 8180
- MF-276 *Beauveria* sp. 8181
- MF-279 *Beauveria* sp. 8182
- MF-281 Unidentified / Hyphomycetes
8183
- MF-282 Unidentified / Hyphomycetes
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- MF-283 *Beauveria* sp. 8185
- MF-284 *Beauveria* sp. 8186
- MF-285 *Beauveria* sp. 8187
- MF-286 *Beauveria* sp. 8188
- MSUFS-001 *Beauveria bassiana* 7152
- MSUFS-002 *Beauveria bassiana* 7153
- MSUFS-003 *Beauveria bassiana* 7154
- MSUFS-004 *Beauveria bassiana* 7155
- MSUFS-005 *Beauveria bassiana* 7156
- MSUFS-006 *Beauveria bassiana* 7157
- MSUFS-007 *Beauveria bassiana* 7158
- MSUFS-008 *Beauveria bassiana* 7159
- MSUFS-009 *Beauveria bassiana* 7160
- MSUFS-011 *Beauveria bassiana* 7161

MSUFS-012 <i>Beauveria bassiana</i> 7162	McManus, Jennifer	Morales, Anuar
MSUFS-013 <i>Beauveria bassiana</i> 7163	HcBbF66.1 2p <i>Beauveria bassiana</i> 4974	#1A <i>Purpureocillium lilacinum</i> 9371
MSUFS-014 <i>Beauveria bassiana</i> 7164	HcBbF66.2 2p <i>Beauveria bassiana</i> 4975	#1B <i>Metarhizium anisopliae</i> sensu lato
MSUFS-015 <i>Beauveria bassiana</i> 7165	HcBbV64 2p <i>Beauveria bassiana</i> 4973	9372
MSUFS-016 <i>Beauveria bassiana</i> 7166		#3 <i>Metarhizium anisopliae</i> sensu lato
MSUFS-017 <i>Beauveria bassiana</i> 7167		9373
MSUFS-018 <i>Beauveria bassiana</i> 7168	Mechaber, Wendy	#6 <i>Metarhizium anisopliae</i> sensu lato
MSUFS-019 <i>Beauveria bassiana</i> 7169	weevil#1318 <i>Fusarium</i> sp. 3030	9374
MSUFS-020 <i>Beauveria bassiana</i> 7170	weevil#1334 <i>Fusarium</i> sp. 3031	
MSUFS-021 <i>Beauveria bassiana</i> 7171	weevil#1354 <i>Fusarium</i> sp. 3032	
MSUFS-022 <i>Beauveria bassiana</i> 7172	weevil#2209 <i>Pochonia bulbillosa</i> (?) 3035	
MSUFS-023 <i>Beauveria bassiana</i> 7173	weevil#2272 <i>Penicillium</i> sp. 3036	
MSUFS-024 <i>Beauveria bassiana</i> 7174	weevil#2354 <i>Beauveria bassiana</i> 3037	
MSUFS-025 <i>Beauveria bassiana</i> 7175		
MSUFS-026 <i>Beauveria bassiana</i> 7176	Mercadier, Guy	
MSUFS-027 <i>Beauveria bassiana</i> 7177	EBCL 97001 <i>Beauveria bassiana</i> 5436	
MSUFS-028 <i>Beauveria bassiana</i> 7178	EBCL 97002 <i>Beauveria bassiana</i> 5437	
MSUFS-029 <i>Beauveria bassiana</i> 7179	EBCL 97003 <i>Beauveria bassiana</i> 5438	
MSUFS-500 <i>Metarhizium anisopliae</i> sensu lato 7180	EBCL 97004 <i>Beauveria bassiana</i> 5439	
MSUFS-701 <i>Lecanicillium lecanii</i> 7181	EBCL 97005 <i>Beauveria bassiana</i> 5440	
MSUFS-702 <i>Lecanicillium lecanii</i> 7182	EBCL 97006 <i>Beauveria bassiana</i> 5477	
López Lastra, Claudia	EBCL 97007 <i>Beauveria bassiana</i> 5478	
1 C <i>Beauveria bassiana</i> 7202	EBCL 97008 <i>Beauveria bassiana</i> 5479	
LPSC	EBCL 97009 <i>Beauveria bassiana</i> 5480	
896 <i>Beauveria bassiana</i> 8372	EBCL 97010 <i>Beauveria bassiana</i> 5481	
897 <i>Beauveria bassiana</i> 8373	EBCL 97011 <i>Beauveria bassiana</i> 5454	
900 <i>Beauveria bassiana</i> 8464	EBCL 97012 <i>Beauveria bassiana</i> 5455	
MAF	EBCL 97013 <i>Beauveria bassiana</i> 5456	
F1 <i>Beauveria brongniartii</i> 3054	EBCL 97014 <i>Beauveria bassiana</i> 5457	
F11 <i>Metarhizium anisopliae</i> sensu lato 3056	EBCL 97015 <i>Beauveria bassiana</i> 5458	
F12 <i>Metarhizium anisopliae</i> sensu lato 3057	EBCL 97016 <i>Beauveria bassiana</i> 5443	
F13 <i>Beauveria bassiana</i> 3063	EBCL 97017 <i>Beauveria bassiana</i> 5444	
F28 <i>Beauveria bassiana</i> 3065	EBCL 97018 <i>Beauveria bassiana</i> 5445	
F29 <i>Beauveria bassiana</i> 3066	EBCL 97019 <i>Beauveria bassiana</i> 5446	
F33 <i>Beauveria bassiana</i> 3070	EBCL 97020 <i>Beauveria bassiana</i> 5447	
F6 <i>Beauveria bassiana</i> 3055	EBCL 97021 <i>Beauveria bassiana</i> 5448	
Majchrowicz, Irena	EBCL 97022 <i>Beauveria bassiana</i> 5449	
23 <i>Beauveria bassiana</i> 3386	EBCL 97023 <i>Beauveria bassiana</i> 5450	
3a <i>Metarhizium robertsii</i> 3388	EBCL 97024 <i>Beauveria bassiana</i> 5451	
56 <i>Beauveria bassiana</i> 1509	EBCL 97025 <i>Beauveria bassiana</i> 5452	
58 <i>Beauveria bassiana</i> 1510	EBCL 97026 <i>Beauveria bassiana</i> 5453	
61 <i>Isaria farinosa</i> 1507	EBCL 97027 <i>Beauveria bassiana</i> 5441	
70 <i>Lecanicillium lecanii</i> 1505	EBCL 97028 <i>Beauveria bassiana</i> 5442	
71 <i>Isaria fumosorosea</i> 1506	EBCL 97029 <i>Beauveria bassiana</i> 5459	
75 <i>Beauveria bassiana</i> 1511	EBCL 97030 <i>Beauveria bassiana</i> 5460	
76 <i>Isaria farinosa</i> 1508	EBCL 97031 <i>Fusarium</i> sp. 5461	
T-11-4 <i>Metarhizium anisopliae</i> sensu lato 3389	EBCL 97032 <i>Beauveria bassiana</i> 5482	
Marold, Lorraine	EBCL 97033 <i>Beauveria bassiana</i> 5483	
ARSEF2547 <i>Metarhizium robertsii</i> 4123	EBCL 97034 <i>Beauveria bassiana</i> 5484	
Martins, Antonio S.	EBCL 97036 <i>Beauveria bassiana</i> 5485	
A-1 <i>Metarhizium anisopliae</i> sensu lato 3329	EBCL 97037 <i>Beauveria bassiana</i> 5486	
McCoy, Clayton W.	EBCL 97038 <i>Beauveria bassiana</i> 5487	
Mada <i>Metarhizium pingshaense</i> 5197	EBCL 97039 <i>Beauveria bassiana</i> 5488	
McKown, P.D.	EBCL 97040 <i>Beauveria bassiana</i> 5489	
C-7 <i>Beauveria bassiana</i> 3534	EBCL 97041 <i>Beauveria bassiana</i> 5490	
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KVL 03-70 <i>Beauveria caledonica</i> 8024		
KVL 04-32 <i>Beauveria bassiana</i> 8037		
KVL 04-33 <i>Beauveria bassiana</i> 8038		
Milner, Richard J.		
Fl1 <i>Beauveria bassiana</i> 4130		

AVRDC 0168B <i>Metarhizium anisopliae</i> sensu lato 8799	AVRDC 0384B <i>Metarhizium anisopliae</i> sensu lato 8869	AVRDC 0467B <i>Metarhizium anisopliae</i> sensu lato 8894
AVRDC 0184B <i>Metarhizium anisopliae</i> sensu lato 8952	AVRDC 0385B <i>Metarhizium anisopliae</i> sensu lato 8947	AVRDC 0468B <i>Metarhizium anisopliae</i> sensu lato 8895
AVRDC 0186B <i>Metarhizium anisopliae</i> sensu lato 8953	AVRDC 0388B <i>Metarhizium anisopliae</i> sensu lato 8870	AVRDC 0469B <i>Metarhizium anisopliae</i> sensu lato 8896
AVRDC 0193B <i>Metarhizium anisopliae</i> sensu lato 8795	AVRDC 0389B <i>Metarhizium anisopliae</i> sensu lato 8948	AVRDC 0470B <i>Metarhizium anisopliae</i> sensu lato 8897
AVRDC 0193B <i>Metarhizium anisopliae</i> sensu lato 8951	AVRDC 0390B <i>Metarhizium anisopliae</i> sensu lato 8860	AVRDC 0477B <i>Metarhizium anisopliae</i> sensu lato 8898
AVRDC 0205B <i>Metarhizium anisopliae</i> sensu lato 8796	AVRDC 0392B <i>Metarhizium anisopliae</i> sensu lato 8871	AVRDC 0482B <i>Isaria farinosa</i> 8917
AVRDC 0214B <i>Metarhizium anisopliae</i> sensu lato 8778	AVRDC 0393B <i>Metarhizium anisopliae</i> sensu lato 8861	AVRDC 0483B <i>Metarhizium anisopliae</i> sensu lato 8899
AVRDC 0216B <i>Metarhizium anisopliae</i> sensu lato 8779	AVRDC 0394B <i>Metarhizium anisopliae</i> sensu lato 8872	AVRDC 0485B <i>Metarhizium anisopliae</i> sensu lato 8900
AVRDC 0224B <i>Metarhizium anisopliae</i> sensu lato 8780	AVRDC 0397B <i>Metarhizium anisopliae</i> sensu lato 8873	AVRDC 0492B <i>Metarhizium anisopliae</i> sensu lato 8901
AVRDC 0238B <i>Metarhizium anisopliae</i> sensu lato 8943	AVRDC 0398B <i>Metarhizium anisopliae</i> sensu lato 8955	AVRDC 0493B <i>Metarhizium anisopliae</i> sensu lato 8915
AVRDC 0244B <i>Metarhizium anisopliae</i> sensu lato 8781	AVRDC 0399B <i>Metarhizium anisopliae</i> sensu lato 8862	AVRDC 0500B <i>Metarhizium anisopliae</i> sensu lato 8902
AVRDC 0245B <i>Metarhizium anisopliae</i> sensu lato 8944	AVRDC 0402B <i>Metarhizium anisopliae</i> sensu lato 8863	AVRDC 0506B <i>Metarhizium anisopliae</i> sensu lato 8949
AVRDC 0246B <i>Metarhizium anisopliae</i> sensu lato 8797	AVRDC 0404B <i>Metarhizium anisopliae</i> sensu lato 8874	AVRDC 0520B <i>Metarhizium anisopliae</i> sensu lato 8916
AVRDC 0260B <i>Metarhizium anisopliae</i> sensu lato 8782	AVRDC 0408B <i>Metarhizium anisopliae</i> sensu lato 8864	AVRDC 0523B <i>Metarhizium anisopliae</i> sensu lato 8903
AVRDC 0262B <i>Metarhizium anisopliae</i> sensu lato 8945	AVRDC 0410B <i>Metarhizium anisopliae</i> sensu lato 8865	AVRDC 0527B <i>Purpureocillium lilacinum</i> 8920
AVRDC 0286B <i>Purpureocillium lilacinum</i> 8919	AVRDC 0411B <i>Metarhizium anisopliae</i> sensu lato 8866	AVRDC 0529B <i>Purpureocillium lilacinum</i> 8921
AVRDC 0293B <i>Metarhizium anisopliae</i> sensu lato 8783	AVRDC 0414B <i>Metarhizium anisopliae</i> sensu lato 8867	AVRDC 0549B <i>Metarhizium anisopliae</i> sensu lato 8904
AVRDC 0295B <i>Metarhizium anisopliae</i> sensu lato 8784	AVRDC 0419B <i>Metarhizium anisopliae</i> sensu lato 8875	AVRDC 0555B <i>Metarhizium anisopliae</i> sensu lato 8905
AVRDC 0303B <i>Metarhizium anisopliae</i> sensu lato 8946	AVRDC 0420B <i>Metarhizium anisopliae</i> sensu lato 8876	AVRDC 0561B <i>Metarhizium anisopliae</i> sensu lato 9235
AVRDC 0312B <i>Metarhizium anisopliae</i> sensu lato 8785	AVRDC 0423B <i>Metarhizium anisopliae</i> sensu lato 8877	AVRDC 0567B <i>Metarhizium anisopliae</i> sensu lato 8906
AVRDC 0331B <i>Metarhizium anisopliae</i> sensu lato 8786	AVRDC 0432B <i>Metarhizium anisopliae</i> sensu lato 8878	AVRDC 0587B <i>Purpureocillium lilacinum</i> 8922
AVRDC 0338B <i>Metarhizium anisopliae</i> sensu lato 8787	AVRDC 0437B <i>Metarhizium anisopliae</i> sensu lato 8879	AVRDC 0588B <i>Lecanicillium muscarium</i> 8923
AVRDC 0344B <i>Metarhizium anisopliae</i> sensu lato 8788	AVRDC 0439B <i>Metarhizium anisopliae</i> sensu lato 8880	AVRDC 0592B <i>Metarhizium anisopliae</i> sensu lato 8907
AVRDC 0346B <i>Metarhizium anisopliae</i> sensu lato 8789	AVRDC 0440B <i>Metarhizium anisopliae</i> sensu lato 8881	AVRDC 0599B <i>Metarhizium anisopliae</i> sensu lato 8908
AVRDC 0350B <i>Metarhizium anisopliae</i> sensu lato 8790	AVRDC 0441B <i>Metarhizium anisopliae</i> sensu lato 8882	AVRDC 0602B <i>Metarhizium anisopliae</i> sensu lato 8950
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AVRDC 0373B <i>Metarhizium anisopliae</i> sensu lato 8792	AVRDC 0449B <i>Metarhizium anisopliae</i> sensu lato 8884	AVRDC 0612B <i>Metarhizium anisopliae</i> sensu lato 8910
AVRDC 0374B <i>Metarhizium anisopliae</i> sensu lato 8793	AVRDC 0450B <i>Metarhizium anisopliae</i> sensu lato 8885	AVRDC 0614B <i>Metarhizium anisopliae</i> sensu lato 8911
AVRDC 0376B <i>Metarhizium anisopliae</i> sensu lato 8954	AVRDC 0451B <i>Metarhizium anisopliae</i> sensu lato 8886	SP-3 <i>Beauveria bassiana</i> 10347
AVRDC 0377B <i>Metarhizium anisopliae</i> sensu lato 8794	AVRDC 0458B <i>Metarhizium anisopliae</i> sensu lato 8887	SP-374 <i>Beauveria bassiana</i> 10350
AVRDC 0381B <i>Metarhizium anisopliae</i> sensu lato 8858	AVRDC 0459B <i>Metarhizium anisopliae</i> sensu lato 8912	SPT 003 <i>Beauveria</i> sp. 5831
AVRDC 0382B <i>Metarhizium anisopliae</i> sensu lato 8868	AVRDC 0462B <i>Metarhizium anisopliae</i> sensu lato 8913	SPT 012 <i>Isaria farinosa</i> 5754
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 SPT-KR-415/2 *Verticillium* sp. 6486
 SPT-KR-452 *Beauveria bassiana* 6499
 SPT-KZ-375 *Beauveria bassiana* 6478
 SPT-KZ-406 *Beauveria bassiana* 6483
 SPT-KZ-412 *Verticillium* sp. 6484
 SPT-KZ-417 *Verticillium lecanii* 6487
 SPT-KZ-418 *Isaria farinosa* 6488
 SPT-KZ-419 *Isaria farinosa* 6489
 SPT-KZ-423 *Isaria farinosa* 6491
 SPT-KZ-458 *Verticillium* sp. 6501
 SPT-U-250 *Beauveria bassiana* 6055
 SPT-U-253 *Beauveria bassiana* 6057
 SPT-U-254 *Beauveria bassiana* 6058
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 SPT-U-261 *Beauveria bassiana* 6061
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 SPT-U-263 *Beauveria bassiana* 6063
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 SPT-U-294 *Beauveria bassiana* 6075
 SPT-U-295 *Beauveria bassiana* 6111
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 SPT-U-305 *Beauveria bassiana* 6077
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 SPT-U-335 *Beauveria bassiana* 6095
 SPT-U-338 *Beauveria bassiana* 6096
 SPT-U-354/2 *Beauveria bassiana* 6099

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Bb UMD-Greenhouse *Beauveria bassiana* 8998

Pereault, Renee J.

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 bbpci#2 *Beauveria bassiana* 8261
 bbpci#3 *Beauveria bassiana* 8262
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 Walton Spray pci#3 *Fusarium* sp. 8266

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 0111 *Beauveria bassiana* 1518
 0112 *Beauveria bassiana* 1519
 0120 Unidentified sp. 1634
 0143 *Beauveria bassiana* 1647
 0165 *Beauveria bassiana* 1815
 0166A *Beauveria bassiana* 1816
 0166B *Beauveria bassiana* 1817
 0166C *Beauveria bassiana* 1818
 0166D *Beauveria bassiana* 1819
 0167A *Beauveria bassiana* 1820
 0167B *Beauveria bassiana* 1821
 0167C *Beauveria bassiana* 1811
 0178 *Beauveria bassiana* 1975
 0183 *Beauveria bassiana* 1980
 0185 *Beauveria bassiana* 1982
 070 *Beauveria bassiana* 1164
 071A *Beauveria bassiana* 1163
 072 *Beauveria bassiana* 1154

073 *Beauveria bassiana* 1155
 074 *Beauveria bassiana* 1153
 082 *Beauveria* sp. 1327
 083 *Acremonium furcatum* 1372
 084 *Lecanicillium muscarium* 1328
 085 *Aphanocladium album* 1329
 086 *Beauveria bassiana* 1398
 087 *Beauveria bassiana* 1399
 088 *Beauveria bassiana* 1389
 089 *Lecanicillium muscarium* 1401
 090 *Lecanicillium muscarium* 1402
 091 *Lecanicillium muscarium* 1403
 645 *Beauveria bassiana* 1191
 646 *Beauveria bassiana* 1192
 647 *Beauveria bassiana* 1193
 648 *Beauveria bassiana* 1194
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 83-611 *Beauveria bassiana* 1306
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 8651 *Scopulariopsis* sp. 2327
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 A6 *Beauveria bassiana* 1174
 A7 *Beauveria bassiana* 1175
 A8 *Beauveria bassiana* 1309
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 E1 *Beauveria bassiana* 1188
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 Togo 2 *Beauveria bassiana* 2689
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Rajak, R.C.

49 *Metarhizium pingshaense* 3210

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 F007 *Beauveria bassiana* 4130
 F010 *Metarhizium brunneum* 4131
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 F033 *Metarhizium anisopliae* sensu lato
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0231 *Beauveria pseudobassiana* 6229
0385 *Beauveria brongniartii* 6235
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- Reid, William**
BS-2010-1 *Tilachlidium* sp. 10132
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124 *Metarhizium frigidum* 4124
- Reyes, Enrique Reyes Dominguez**
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BbCO2 *Beauveria bassiana* 3819
BbCO2 Unidentified sp. 3821
BbH Unidentified sp. 3821
- Riethmacher, Guenter W.**
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Bet2 *Beauveria bassiana* 3198
Bet3 *Beauveria bassiana* 3199
- Roberts, Donald W.**
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103a *Metarhizium anisopliae* sensu lato 1903
MaT3JB-A *Metarhizium robertsii* 1878
MaT3JB-B *Metarhizium robertsii* 1298
MaT3JB-C *Metarhizium anisopliae* sensu lato 1280
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- Rodriguez Sierra, Dora Alba**
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201 Bb *Beauveria bassiana* 2250
203 Bb *Beauveria bassiana* 2249
- Rombach, Michiel C.**
140486 *Metarhizium brunneum* 2224
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- Shimazu, Mitsuaki**
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F-77 *Beauveria amorpha* 1676
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17 *Metarhizium brunneum* 817
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20 *Beauveria bassiana* 816
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- Soper, Richard S.**
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- Sosa-Gómez, Daniel R.**
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B-158 *Engyodontium rectidentatum* 7805
B-173 *Isaria fumosorosea* 7716
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B-22 *Beauveria* sp. 7580
B-25 *Beauveria bassiana* 7581
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B-405/2 *Isaria farinosa* 9516
B-46 *Clonostachys rosea* 9491
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VL-1325/1 *Polycephalomyces* sp. 9496
 VL-1396/2 *Beauveria bassiana* 9444
 VL-1582 *Beauveria brongniartii* 9452
 VL-1587/2 *Lecanicillium* sp. 9459
 VL-1587/3 *Isaria farinosa* 9511
 VL-1786 *Simplicillium lamellicolle* 9479
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 VL-1951 *Polycephalomyces* sp. 9497
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 VL-277 *Beauveria bassiana* 9442
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135 Sterile mycelium 4009
 193 *Fusarium* sp. 4011
 195 *Beauveria bassiana* 4013
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 SSL 32 *Metarhizium anisopliae* sensu lato 5841
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 EFCC 9251 *Isaria farinosa* 7276
 KEFC-6200 *Beauveria bassiana* 6721
 KEFC-1087 Unidentified / Hyphomycetes 5695
 KEFC-1105 *Beauveria* sp. 5697
 KEFC-1170 *Isaria farinosa* 5699
 KEFC-251 *Beauveria sungii* 5689
 KEFC-919 *Isaria fumosorosea* 5694

Tanyeli, Elif

Dm-1 *Lecanicillium muscarium* 9267
 Dm-10 *Isaria farinosa* 9276
 Dm-11 *Isaria farinosa* 9277
 Dm-12 *Isaria farinosa* 9278
 Dm-2 *Lecanicillium muscarium* 9268
 Dm-3 *Isaria farinosa* 9269
 Dm-4 *Isaria farinosa* 9270
 Dm-5 *Beauveria bassiana*(?) 9271
 Dm-6 *Beauveria* sp. 9272
 Dm-7 *Fusarium* sp. 9273
 Dm-8 *Fusarium* sp. 9274
 Dm-9 *Isaria farinosa* 9275

Tate and Lyle Ltd

Batch No. B1830 *Metarhizium robertsii* 2575
 Batch No. B1830 *Metarhizium robertsii* 3608

Thamarai Chelvi, C.

1 *Metarhizium anisopliae* sensu stricto 10472
 4 *Metarhizium anisopliae* sensu stricto 10475
 5 *Metarhizium anisopliae* sensu stricto 10476

Theunis, W.

PNG 1 *Metarhizium guizhouense* 4604
 SOL IS 10 *Metarhizium anisopliae* sensu lato 4339
 SOL IS 11 *Metarhizium anisopliae* sensu lato 4338
 SOL IS 12 *Metarhizium anisopliae* sensu lato 4336
 SOL IS 12 *Metarhizium anisopliae* sensu lato 4341
 SOL IS 14 *Metarhizium anisopliae* sensu lato 4337
 SOL IS 14 *Metarhizium anisopliae* sensu lato 4340
 SOL IS 15 *Metarhizium pingshaense* 4342
 SOL IS 16 *Metarhizium anisopliae* sensu lato 4334
 SOL IS 17 *Metarhizium anisopliae* sensu lato 4290
 SOL IS 2 *Metarhizium anisopliae* sensu lato 4572
 SOL IS 4 *Metarhizium pingshaense* 4610
 SOL IS 6 *Metarhizium anisopliae* sensu lato 4333
 SOL IS 7 *Metarhizium anisopliae* sensu lato 4335
 SOL IS 1 *Metarhizium anisopliae* sensu lato 4582

UAMH

8723 *Tolypocladium inflatum* 4884

Alternate Collections

Vandenberg, John D.

- 18 *Metarhizium anisopliae* sensu lato
4820
21 *Metarhizium anisopliae* sensu lato
4823
27-2 *Fusarium* sp. 4825
29 *Metarhizium anisopliae* sensu lato
4821
29-2 *Metarhizium anisopliae* sensu lato
4824
63 *Metarhizium anisopliae* sensu lato
4819
JP1 *Metarhizium anisopliae* sensu lato
4822

Vänninen, Irene

- SF85-2 *Beauveria* sp. 5622
SF85-56 *Metarhizium brunneum* 5625
SF85-60 *Metarhizium anisopliae* sensu
lato 5624
SF86-38 *Metarhizium brunneum* 5626
SF86-82 *Isaria fumosorosea* 5627
SF86-9 *Beauveria bassiana* 5623

Vega, Fernando E.

- CBB9-2 *Acremonium alternatum* 7282
EBCL 97054 *Isaria fumosorosea* 6730
EBCL 98004 *Fusarium* sp. 5875
EBCL 98005 *Purpureocillium lilacinum*
5876
EBCL 98008 *Purpureocillium lilacinum*
5877
EBCL 98011 *Fusarium* sp. 5878
EBCL 98012 *Fusarium* sp. 5879
EBCL 98015 *Purpureocillium lilacinum*
5880
EBCL 98022 *Purpureocillium lilacinum*
5882
EBCL 99024 *Purpureocillium lilacinum*
6188
EBCL 99027 *Purpureocillium lilacinum*
6190
EBCL 99046 *Beauveria bassiana* 6526
EBCL 99048 *Beauveria bassiana* 6527
EBCL 99055 *Beauveria bassiana* 6528
EBCL 99057 *Beauveria bassiana* 6529
EBCL 99059 *Beauveria bassiana* 6530
EBCL 99070 *Beauveria bassiana* 6531
EBCL 99071 *Beauveria bassiana* 6532
MPM-5 *Isaria fumosorosea* 7284

Watson, D. Wesley

- P 89 *Beauveria bassiana* 3111

Whitney, H. Stuart

- CPB-1 *Beauveria bassiana* 2030
CPB-2 *Beauveria bassiana* 2031
CPB-3 *Beauveria bassiana* 2032
LBB-multi *Beauveria bassiana* 2033
LBB-multi 2 *Beauveria bassiana* 2034
R599 *Evlachovaea* sp. 1017
R629 *Beauveria bassiana* 1848
R630 *Beauveria bassiana* 1849
R634 *Beauveria bassiana* 1852
R636 *Beauveria bassiana* 1853
R637 *Beauveria bassiana* 1854
R640 *Beauveria pseudobassiana* 1855

Wilding, Neil

- 85 *Zoophthora anglica* 1739

Wojciechowska, M.

- 1110 *Beauveria bassiana* 157
24 *Beauveria bassiana* 150
28 *Beauveria bassiana* 149

Zimmermann, Gisbert

- E 1622/01 *Evlachovaea* sp. 7403

Zou, Xiao

- 9 *Isaria fumosorosea* 9602

23	Metarhizium robertsii	758	Beauveria bassiana	1072	Beauveria brongniartii
79	Conidiobolus osmodes	760	Metarhizium anisopliae sensu lato	1073	Beauveria bassiana
80	Conidiobolus sp.	783	Beauveria bassiana	1074	Beauveria bassiana
81	Conidiobolus sp.	784	Beauveria bassiana	1075	Beauveria bassiana
113	Zoophthora phytonomi	785	Beauveria bassiana	1076	Beauveria brongniartii
149	Beauveria bassiana	786	Beauveria bassiana	1077	Beauveria brongniartii
150	Beauveria bassiana	787	Beauveria bassiana	1079	Beauveria bassiana
157	Beauveria bassiana	788	Beauveria bassiana	1081	Beauveria bassiana
191	Zoophthora phytonomi	797	Metarhizium robertsii	1106	Beauveria bassiana
192	Zoophthora phytonomi	799	Isaria farinosa	1123	Sorosporella uvella
201	Beauveria bassiana	804	Beauveria bassiana	1153	Beauveria bassiana
202	Zoophthora phytonomi	805	Beauveria bassiana	1154	Beauveria bassiana
252	Beauveria bassiana	808	Metarhizium anisopliae sensu lato	1155	Beauveria bassiana
293	Beauveria bassiana	809	Beauveria bassiana	1156	Beauveria bassiana
297	Metarhizium anisopliae var. majus	813	Beauveria bassiana	1157	Beauveria bassiana
298	Metarhizium anisopliae var. majus	814	Beauveria bassiana	1158	Beauveria bassiana
301	Beauveria bassiana	815	Beauveria bassiana	1159	Beauveria bassiana
317	Beauveria bassiana	816	Beauveria bassiana	1160	Beauveria bassiana
318	Beauveria bassiana	817	Metarhizium brunneum	1161	Beauveria bassiana
319	Beauveria bassiana	818	Metarhizium anisopliae sensu lato	1162	Beauveria bassiana
322	Isaria javanica	819	Metarhizium guizhouense	1163	Beauveria bassiana
325	Beauveria bassiana	820	Metarhizium brunneum	1164	Beauveria bassiana
336	Beauveria bassiana	842	Beauveria bassiana	1165	Beauveria bassiana
337	Beauveria bassiana	915	Pandora blunckii	1167	Beauveria bassiana
340	Beauveria bassiana	917	Pandora blunckii	1168	Beauveria bassiana
344	Beauveria bassiana	920	Pandora blunckii	1169	Beauveria bassiana
346	Metarhizium brunneum	928	Beauveria bassiana	1170	Beauveria bassiana
350	Beauveria bassiana	929	Metarhizium anisopliae sensu lato	1171	Beauveria bassiana
353	Beauveria bassiana	930	Beauveria bassiana	1172	Beauveria bassiana
384	Beauveria bassiana	931	Beauveria bassiana	1173	Beauveria bassiana
396	Zoophthora anglica	932	Metarhizium anisopliae sensu lato	1174	Beauveria bassiana
410	Purpureocillium lilacinum	934	Beauveria bassiana	1175	Beauveria bassiana
412	Beauveria bassiana	937	Beauveria bassiana	1176	Beauveria bassiana
413	Beauveria bassiana	938	Beauveria bassiana	1177	Beauveria bassiana
416	Beauveria bassiana	939	Metarhizium anisopliae sensu lato	1178	Beauveria bassiana
433	Beauveria bassiana	941	Beauveria bassiana	1179	Beauveria bassiana
472	Metarhizium brunneum	942	Beauveria bassiana	1180	Beauveria bassiana
504	Beauveria bassiana	943	Beauveria bassiana	1181	Beauveria bassiana
505	Beauveria bassiana	946	Beauveria bassiana	1182	Beauveria bassiana
506	Beauveria bassiana	947	Beauveria bassiana	1183	Beauveria bassiana
507	Beauveria bassiana	948	Beauveria bassiana	1184	Metarhizium flavoviride var. flavoviride■
509	Beauveria bassiana	949	Beauveria bassiana	1185	Beauveria bassiana
510	Beauveria bassiana	950	Beauveria bassiana	1186	Beauveria bassiana
534	Beauveria bassiana	951	Beauveria bassiana	1188	Beauveria bassiana
535	Beauveria bassiana	952	Beauveria bassiana	1189	Beauveria bassiana
538	Metarhizium pingshaense	953	Beauveria bassiana	1190	Beauveria bassiana
547	Beauveria sp.	954	Metarhizium anisopliae sensu lato	1191	Beauveria bassiana
617	Beauveria brongniartii	956	Beauveria bassiana	1192	Beauveria bassiana
683	Metarhizium guizhouense	958	Beauveria bassiana	1193	Beauveria bassiana
721	Beauveria bassiana	977	Metarhizium guizhouense	1194	Beauveria bassiana
722	Isaria fumosorosea	978	Metarhizium majus	1280	Metarhizium anisopliae sensu lato
723	Purpureocillium lilacinum	979	Beauveria brongniartii	1298	Metarhizium robertsii
724	Metarhizium robertsii	982	Beauveria bassiana	1306	Beauveria bassiana
725	Metarhizium anisopliae sensu lato	984	Paecilomyces canadensis	1309	Beauveria bassiana
731	Beauveria bassiana	985	Beauveria brongniartii	1310	Fusarium sp.
732	Beauveria bassiana	1016	Beauveria bassiana	1311	Beauveria bassiana
733	Beauveria bassiana	1017	Evlachovaea sp.	1312	Beauveria bassiana
734	Beauveria bassiana	1039	Beauveria bassiana	1313	Beauveria bassiana
735	Beauveria bassiana	1041	Beauveria bassiana	1327	Beauveria sp.
736	Beauveria bassiana	1043	Mixed Culture sp.	1328	Lecanicillium muscarium
738	Beauveria bassiana	1046	Metarhizium robertsii	1329	Aphanocladium album
739	Beauveria bassiana	1056	Metarhizium anisopliae sensu lato	1335	Lecanicillium muscarium
741	Isaria amoenerosea	1060	Beauveria bassiana	1372	Acremonium furcatum
744	Isaria amoenerosea	1061	Beauveria bassiana	1377	Metarhizium anisopliae sensu lato
751	Beauveria bassiana	1066	Metarhizium brunneum	1389	Beauveria bassiana
752	Beauveria bassiana	1067	Beauveria brongniartii	1398	Beauveria bassiana
753	Beauveria bassiana	1068	Beauveria brongniartii	1399	Beauveria bassiana
754	Beauveria bassiana	1069	Beauveria brongniartii	1401	Lecanicillium muscarium
756	Beauveria bassiana	1070	Beauveria brongniartii	1402	Lecanicillium muscarium
757	Beauveria bassiana	1071	Beauveria brongniartii	1403	Lecanicillium muscarium

1424	Polycephalomyces formosus	1710	Beauveria bassiana	2076	Metarhizium anisopliae sensu lato
1431	Beauveria brongniartii	1711	Beauveria bassiana	2077	Metarhizium anisopliae sensu lato
1450	Beauveria bassiana	1712	Beauveria bassiana	2079	Beauveria bassiana
1453	Beauveria bassiana	1713	Beauveria bassiana	2107	Metarhizium brunneum
1454	Beauveria bassiana	1715	Pandora blunckii	2134	Metarhizium robertsii
1455	Beauveria bassiana	1716	Pandora blunckii	2135	Metarhizium anisopliae sensu lato
1456	Beauveria bassiana	1717	Pandora blunckii	2136	Metarhizium anisopliae sensu lato
1458	Beauveria bassiana	1718	Pandora blunckii	2137	Metarhizium anisopliae sensu lato
1459	Beauveria bassiana	1721	Beauveria bassiana	2138	Metarhizium anisopliae sensu lato
1460	Beauveria bassiana	1722	Beauveria bassiana	2139	Metarhizium anisopliae sensu lato
1461	Beauveria bassiana	1723	Beauveria bassiana	2151	Metarhizium anisopliae var. majus
1462	Beauveria bassiana	1739	Zoophthora anglica	2156	Metarhizium anisopliae sensu lato
1463	Beauveria bassiana	1749	Beauveria bassiana	2162	Metarhizium pingshaense
1464	Beauveria bassiana	1750	Beauveria bassiana	2163	Metarhizium anisopliae sensu lato
1465	Beauveria bassiana	1775	Beauveria bassiana	2165	Metarhizium anisopliae sensu lato
1466	Beauveria bassiana	1776	Beauveria bassiana	2166	Metarhizium anisopliae sensu lato
1467	Beauveria bassiana	1777	Beauveria bassiana	2167	Metarhizium anisopliae sensu lato
1469	Beauveria bassiana	1778	Beauveria bassiana	2169	Scopulariopsis sp.
1470	Beauveria bassiana	1779	Beauveria bassiana	2173	Aspergillus parasiticus
1471	Beauveria bassiana	1780	Beauveria bassiana	2188	Zoophthora phytonomi
1472	Beauveria bassiana	1781	Beauveria bassiana	2210	Metarhizium brunneum
1473	Beauveria bassiana	1811	Beauveria bassiana	2216	Isaria fumosorosea
1475	Beauveria bassiana	1815	Beauveria bassiana	2217	Isaria fumosorosea
1476	Beauveria bassiana	1816	Beauveria bassiana	2218	Pochonia chlamydosporia var. chlamydosporia
1480	Beauveria bassiana	1817	Beauveria bassiana	2219	Isaria fumosorosea
1483	Beauveria bassiana	1818	Beauveria bassiana	2220	Isaria amoenerosea
1491	Beauveria bassiana	1819	Beauveria bassiana	2221	Isaria fumosorosea
1505	Lecanicillium lecanii	1820	Beauveria bassiana	2223	Metarhizium anisopliae sensu stricto
1506	Isaria fumosorosea	1821	Beauveria bassiana	2224	Metarhizium brunneum
1507	Isaria farinosa	1833	Beauveria bassiana	2225	Unidentified / Hyphomycetes
1508	Isaria farinosa	1835	Beauveria sp.	2231	Metarhizium pingshaense
1509	Beauveria bassiana	1848	Beauveria bassiana	2248	Beauveria bassiana
1510	Beauveria bassiana	1849	Beauveria bassiana	2249	Beauveria bassiana
1511	Beauveria bassiana	1852	Beauveria bassiana	2250	Beauveria bassiana
1515	Beauveria bassiana	1853	Beauveria bassiana	2251	Beauveria caledonica
1518	Beauveria bassiana	1854	Beauveria bassiana	2270	Beauveria bassiana
1519	Beauveria bassiana	1855	Beauveria pseudobassiana	2271	Beauveria brongniartii
1559	Beauveria bassiana	1858	Metarhizium majus	2327	Scopulariopsis sp.
1560	Beauveria bassiana	1859	Metarhizium majus	2330	Beauveria bassiana
1561	Beauveria bassiana	1878	Metarhizium robertsii	2355	Isaria farinosa
1562	Beauveria bassiana	1885	Metarhizium anisopliae sensu lato	2412	Beauveria sp.
1563	Beauveria bassiana	1897	Metarhizium robertsii	2415	Tilachlidium sp.
1566	Beauveria bassiana	1901	Metarhizium anisopliae sensu lato	2463	Beauveria bassiana
1567	Beauveria caledonica	1903	Metarhizium anisopliae sensu lato	2469	Metarhizium robertsii
1572	Conidiobolus coronatus	1910	Metarhizium robertsii	2505	Zoophthora anglica
1573	Conidiobolus coronatus	1914	Metarhizium majus	2509	Beauveria bassiana
1574	Conidiobolus coronatus	1946	Metarhizium majus	2511	Beauveria bassiana
1575	Conidiobolus coronatus	1951	Purpureocillium lilacinum	2512	Beauveria bassiana
1619	Beauveria bassiana	1954	Beauveria bassiana	2513	Metarhizium anisopliae sensu lato
1620	Beauveria bassiana	1956	Beauveria bassiana	2514	Metarhizium robertsii
1621	Beauveria bassiana	1957	Isaria farinosa	2515	Beauveria bassiana
1622	Beauveria bassiana	1958	Metarhizium anisopliae sensu lato	2518	Metarhizium anisopliae sensu stricto
1623	Beauveria bassiana	1961	Beauveria bassiana	2520	Beauveria bassiana
1624	Beauveria bassiana	1966	Beauveria bassiana	2525	Erynia sp.
1634	Unidentified sp.	1968	Metarhizium robertsii	2536	Erynia sp.
1647	Beauveria bassiana	1969	Beauveria amorpha	2537	Erynia sp.
1676	Beauveria amorpha	1971	Beauveria bassiana	2538	Erynia sp.
1678	Beauveria bassiana	1975	Beauveria bassiana	2539	Erynia sp.
1679	Beauveria bassiana	1980	Beauveria bassiana	2547	Metarhizium robertsii
1680	Beauveria amorpha	1982	Beauveria bassiana	2548	Metarhizium anisopliae sensu lato
1681	Beauveria sp.	1989	Metarhizium anisopliae sensu lato	2553	Erynia sp.
1682	Beauveria sp.	2010	Beauveria bassiana	2557	Beauveria bassiana
1683	Beauveria bassiana	2024	Metarhizium flavoviride	2559	Beauveria bassiana
1685	Beauveria sungii	2030	Beauveria bassiana	2568	Fusarium sp.
1704	Beauveria bassiana	2031	Beauveria bassiana	2569	Fusarium sp.
1705	Beauveria bassiana	2032	Beauveria bassiana	2575	Metarhizium robertsii
1706	Beauveria bassiana	2033	Beauveria bassiana	2579	Beauveria bassiana
1707	Beauveria bassiana	2034	Beauveria bassiana	2580	Beauveria bassiana
1708	Beauveria bassiana	2040	Beauveria bassiana	2625	Beauveria bassiana
1709	Beauveria bassiana	2075	Beauveria bassiana		

2626	Beauveria bassiana	3198	Beauveria bassiana	3819	Beauveria bassiana
2635	Metarhizium anisopliae sensu lato	3199	Beauveria bassiana	3821	Unidentified sp.
2638	Beauveria bassiana	3210	Metarhizium pingshaense	3841	Unidentified sp.
2639	Beauveria bassiana	3211	Metarhizium robertsii	3864	Metarhizium brunneum
2642	Beauveria bassiana	3219	Beauveria bassiana	3924	Metarhizium anisopliae sensu stricto
2660	Beauveria brongniartii	3287	Beauveria bassiana	3980	Unidentified sp.
2663	Erynia sp.	3305	Metarhizium anisopliae sensu lato	4001	Beauveria bassiana
2664	Erynia sp.	3306	Metarhizium anisopliae sensu lato	4009	Sterile mycelium
2676	Beauveria bassiana	3308	Metarhizium anisopliae sensu lato	4011	Fusarium sp.
2679	Isaria fumosorosea	3309	Beauveria bassiana	4013	Beauveria bassiana
2685	Beauveria bassiana	3310	Beauveria bassiana	4015	Beauveria bassiana
2686	Beauveria bassiana	3311	Beauveria bassiana	4016	Beauveria bassiana
2687	Beauveria bassiana	3314	Pochonia chlamydosporia	4018	Beauveria bassiana
2688	Beauveria bassiana	3329	Metarhizium anisopliae sensu lato	4019	Beauveria bassiana
2689	Beauveria bassiana	3330	Metarhizium anisopliae sensu lato	4020	Metarhizium brunneum
2690	Beauveria bassiana	3331	Metarhizium anisopliae sensu lato	4021	Beauveria bassiana
2691	Beauveria bassiana	3332	Metarhizium anisopliae sensu lato	4022	Verticillium lecanii
2692	Beauveria bassiana	3333	Metarhizium anisopliae sensu lato	4023	Beauveria bassiana
2693	Beauveria bassiana	3334	Metarhizium anisopliae sensu lato	4024	Beauveria brongniartii
2694	Beauveria varroae	3335	Metarhizium anisopliae sensu lato	4027	Beauveria sp.
2695	Beauveria bassiana	3336	Metarhizium anisopliae sensu lato	4028	Beauveria bassiana
2832	Lecanicillium sp. 2(?)	3337	Metarhizium anisopliae sensu lato	4029	Isaria farinosa
2915	Stilbella buquetii	3338	Metarhizium anisopliae sensu lato	4031	Beauveria bassiana
2937	Isaria farinosa	3339	Metarhizium anisopliae sensu lato	4032	Beauveria bassiana
2938	Beauveria bassiana	3340	Metarhizium anisopliae sensu lato	4033	Lecanicillium muscarium
2941	Metarhizium anisopliae sensu lato	3342	Zoophthora phytonomi	4034	Beauveria bassiana
2942	Beauveria bassiana	3343	Zoophthora phytonomi	4036	Lecanicillium muscarium
2945	Beauveria bassiana	3344	Zoophthora phytonomi	4037	Unidentified sp.
2946	Beauveria bassiana	3386	Beauveria bassiana	4038	Beauveria bassiana
2950	Penicillium sp.	3388	Metarhizium robertsii	4039	Isaria farinosa
2952	Purpureocillium lilacinum	3389	Metarhizium anisopliae sensu lato	4040	Isaria farinosa
2956	Isaria fumosorosea	3403	Beauveria bassiana	4041	Beauveria bassiana
2958	Isaria amoenerosea	3437	Beauveria bassiana	4043	Isaria farinosa
2959	Isaria amoenerosea	3438	Beauveria bassiana	4044	Isaria farinosa
2960	Isaria amoenerosea	3439	Beauveria bassiana	4045	Isaria farinosa
2961	Beauveria bassiana	3440	Beauveria bassiana	4046	Beauveria bassiana
2981	Metarhizium robertsii	3441	Beauveria bassiana	4047	Verticillium lecanii
2983	Beauveria bassiana	3442	Beauveria bassiana	4048	Verticillium lecanii
2984	Beauveria bassiana	3443	Beauveria bassiana	4049	Beauveria bassiana
2985	Beauveria bassiana	3444	Beauveria bassiana	4050	Lecanicillium longisporum
2986	Beauveria bassiana	3445	Beauveria bassiana	4051	Beauveria bassiana
2987	Beauveria bassiana	3446	Beauveria bassiana	4052	Beauveria bassiana
2988	Beauveria bassiana	3447	Beauveria bassiana	4054	Beauveria bassiana
2989	Beauveria bassiana	3448	Beauveria bassiana	4055	Beauveria bassiana
2990	Beauveria bassiana	3450	Beauveria bassiana	4056	Beauveria bassiana
2991	Beauveria bassiana	3451	Beauveria bassiana	4097	Isaria amoenerosea
2999	Unidentified / Hyphomycetes	3452	Beauveria bassiana	4123	Metarhizium robertsii
3030	Fusarium sp.	3453	Beauveria bassiana	4124	Metarhizium frigidum
3031	Fusarium sp.	3455	Beauveria bassiana	4125	Metarhizium anisopliae sensu lato
3032	Fusarium sp.	3457	Beauveria bassiana	4130	Beauveria bassiana
3035	Pochonia bulbillosa(?)	3471	Unidentified sp.	4131	Metarhizium brunneum
3036	Penicillium sp.	3478	Unidentified sp.	4132	Metarhizium anisopliae sensu lato
3037	Beauveria bassiana	3479	Metarhizium anisopliae sensu lato	4133	Metarhizium anisopliae sensu lato
3040	Beauveria bassiana	3534	Beauveria bassiana	4134	Metarhizium anisopliae sensu lato
3054	Beauveria brongniartii	3603	Metarhizium guizhouense	4135	Beauveria bassiana
3055	Beauveria bassiana	3604	Metarhizium pingshaense	4136	Beauveria bassiana
3056	Metarhizium anisopliae sensu lato	3608	Metarhizium robertsii	4137	Metarhizium anisopliae sensu lato
3057	Metarhizium anisopliae sensu lato	3667	Beauveria bassiana	4138	Metarhizium anisopliae sensu lato
3063	Beauveria bassiana	3713	Metarhizium anisopliae sensu lato	4139	Metarhizium anisopliae sensu lato
3065	Beauveria bassiana	3714	Unidentified sp.	4140	Unidentified sp.
3066	Beauveria bassiana	3715	Verticillium insectorum	4141	Metarhizium anisopliae sensu lato
3070	Beauveria bassiana	3716	Beauveria bassiana	4142	Metarhizium anisopliae sensu lato
3097	Beauveria bassiana	3717	Beauveria bassiana	4149	Beauveria amorphia
3098	Beauveria bassiana	3718	Cordyceps sp.	4228	Metarhizium brunneum
3108	Metarhizium robertsii	3719	Unidentified sp.	4236	Metarhizium anisopliae sensu lato
3111	Beauveria bassiana	3720	Metarhizium anisopliae sensu lato	4239	Metarhizium anisopliae sensu lato
3112	Beauveria bassiana	3721	Metarhizium robertsii	4243	Sterile mycelium
3145	Metarhizium anisopliae var. majus	3722	Unidentified sp.	4274	Beauveria bassiana
3148	Metarhizium anisopliae sensu lato	3724	Unidentified sp.	4290	Metarhizium anisopliae sensu lato
3197	Beauveria bassiana	3818	Beauveria bassiana	4333	Metarhizium anisopliae sensu lato

4334	Metarhizium anisopliae sensu lato	4878	Tolypocladium inflatum	5359	Beauveria brongniartii
4335	Metarhizium anisopliae sensu lato	4879	Tolypocladium inflatum	5360	Beauveria brongniartii
4336	Metarhizium anisopliae sensu lato	4880	Tolypocladium inflatum	5361	Beauveria brongniartii
4337	Metarhizium anisopliae sensu lato	4881	Tolypocladium inflatum	5362	Beauveria brongniartii
4338	Metarhizium anisopliae sensu lato	4882	Tolypocladium inflatum	5363	Beauveria brongniartii
4339	Metarhizium anisopliae sensu lato	4883	Tolypocladium inflatum	5364	Beauveria brongniartii
4340	Metarhizium anisopliae sensu lato	4884	Tolypocladium inflatum	5436	Beauveria bassiana
4341	Metarhizium anisopliae sensu lato	4885	Tolypocladium inflatum	5437	Beauveria bassiana
4342	Metarhizium pingshaense	4886	Tolypocladium inflatum	5438	Beauveria bassiana
4346	Metarhizium anisopliae sensu lato	4887	Tolypocladium inflatum	5439	Beauveria bassiana
4380	Beauveria brongniartii	4888	Tolypocladium inflatum	5440	Beauveria bassiana
4381	Beauveria brongniartii	4889	Tolypocladium inflatum	5441	Beauveria bassiana
4382	Beauveria bassiana	4890	Tolypocladium inflatum	5442	Beauveria bassiana
4384	Beauveria asiatica	4891	Tolypocladium inflatum	5443	Beauveria bassiana
4385	Beauveria brongniartii	4892	Tolypocladium inflatum	5444	Beauveria bassiana
4386	Beauveria brongniartii	4893	Tolypocladium inflatum	5445	Beauveria bassiana
4387	Mixed Culture sp.	4894	Tolypocladium inflatum	5446	Beauveria bassiana
4388	Beauveria brongniartii	4895	Tolypocladium inflatum	5447	Beauveria bassiana
4389	Beauveria brongniartii	4896	Tolypocladium inflatum	5448	Beauveria bassiana
4390	Beauveria sp.	4897	Tolypocladium inflatum	5449	Beauveria bassiana
4391	Beauveria sp.	4898	Tolypocladium inflatum	5450	Beauveria bassiana
4392	Beauveria sp.	4907	Metarhizium anisopliae sensu lato	5451	Beauveria bassiana
4458	Beauveria brongniartii	4908	Metarhizium anisopliae sensu lato	5452	Beauveria bassiana
4465	Beauveria brongniartii	4909	Beauveria sp.	5453	Beauveria bassiana
4466	Beauveria brongniartii	4910	Beauveria sp.	5454	Beauveria bassiana
4467	Beauveria brongniartii	4911	Beauveria sp.	5455	Beauveria bassiana
4468	Beauveria brongniartii	4912	Beauveria sp.	5456	Beauveria bassiana
4469	Beauveria brongniartii	4913	Beauveria sp.	5457	Beauveria bassiana
4470	Beauveria brongniartii	4914	Beauveria sp.	5458	Beauveria bassiana
4471	Beauveria brongniartii	4915	Beauveria sp.	5459	Beauveria bassiana
4472	Beauveria brongniartii	4916	Beauveria sp.	5460	Beauveria bassiana
4473	Beauveria brongniartii	4917	Beauveria sp.	5461	Fusarium sp.
4474	Beauveria asiatica	4918	Beauveria sp.	5465	Beauveria bassiana
4475	Beauveria brongniartii	4933	Beauveria pseudobassiana	5474	Hirsutella fusiformis
4476	Beauveria brongniartii	4973	Beauveria bassiana	5477	Beauveria bassiana
4477	Beauveria brongniartii	4974	Beauveria bassiana	5478	Beauveria bassiana
4478	Beauveria brongniartii	4975	Beauveria bassiana	5479	Beauveria bassiana
4557	Metarhizium anisopliae sensu lato	4990	Beauveria amorpha	5480	Beauveria bassiana
4558	Metarhizium anisopliae sensu lato	4992	Beauveria brongniartii	5481	Beauveria bassiana
4566	Metarhizium majus	4993	Beauveria brongniartii	5482	Beauveria bassiana
4568	Metarhizium anisopliae sensu lato	4994	Beauveria brongniartii	5483	Beauveria bassiana
4572	Metarhizium anisopliae sensu lato	4995	Beauveria brongniartii	5484	Beauveria bassiana
4574	Metarhizium anisopliae sensu lato	5070	Beauveria bassiana	5485	Beauveria bassiana
4582	Metarhizium anisopliae sensu lato	5071	Beauveria bassiana	5486	Beauveria bassiana
4601	Metarhizium majus	5072	Beauveria bassiana	5487	Beauveria bassiana
4604	Metarhizium guizhouense	5073	Isaria farinosa	5488	Beauveria bassiana
4610	Metarhizium pingshaense	5074	Isaria farinosa	5489	Beauveria bassiana
4677	Metarhizium anisopliae sensu lato	5075	Isaria farinosa	5490	Beauveria bassiana
4716	Metarhizium anisopliae sensu lato	5080	Isaria farinosa	5498	Ophiocordyceps aphodii
4719	Metarhizium flavoviride var. flavoviride■	5148	Beauveria bassiana	5501	Beauveria bassiana
4720	Metarhizium flavoviride var. flavoviride■	5149	Metarhizium robertsii	5533	Beauveria bassiana
4721	Beauveria bassiana	5150	Beauveria bassiana	5534	Beauveria bassiana
4722	Metarhizium anisopliae sensu lato	5184	Paecilomyces sp.	5535	Beauveria bassiana
4777	Metarhizium anisopliae sensu lato	5186	Beauveria sp.	5536	Beauveria bassiana
4778	Metarhizium anisopliae sensu lato	5188	Mixed Culture sp.	5537	Beauveria bassiana
4779	Metarhizium anisopliae sensu lato	5193	Paecilomyces sp.	5553	Beauveria bassiana
4780	Metarhizium anisopliae sensu lato	5195	Beauveria bassiana	5601	Harposporium janus
4798	Beauveria bassiana	5197	Metarhizium pingshaense	5622	Beauveria sp.
4799	Beauveria bassiana	5198	Metarhizium brunneum	5623	Beauveria bassiana
4819	Metarhizium anisopliae sensu lato	5223	Unidentified / Hyphomycetes	5624	Metarhizium anisopliae sensu lato
4820	Metarhizium anisopliae sensu lato	5224	Unidentified / Hyphomycetes	5625	Metarhizium brunneum
4821	Metarhizium anisopliae sensu lato	5225	Unidentified / Hyphomycetes	5626	Metarhizium brunneum
4822	Metarhizium anisopliae sensu lato	5226	Unidentified / Hyphomycetes	5627	Isaria fumosorosea
4823	Metarhizium anisopliae sensu lato	5227	Unidentified / Hyphomycetes	5664	Synnematium jonesii
4824	Metarhizium anisopliae sensu lato	5286	Beauveria bassiana	5668	Beauveria bassiana
4825	Fusarium sp.	5352	Erynia sp.	5669	Beauveria bassiana
4849	Isaria amoenerosea	5355	Beauveria brongniartii	5670	Beauveria bassiana
4852	Cordyceps sp.	5356	Beauveria brongniartii	5677	Unidentified / Hyphomycetes
4853	Beauveria sp.	5357	Beauveria brongniartii	5678	Beauveria sp.
4877	Tolypocladium inflatum	5358	Beauveria brongniartii	5689	Beauveria sungii

5694 Isaria fumosorosea	6113 Beauveria bassiana	6683 Metarhizium anisopliae sensu lato
5695 Unidentified / Hyphomycetes	6120 Metarhizium brunneum	6684 Metarhizium anisopliae sensu lato
5697 Beauveria sp.	6188 Purpureocillium lilacinum	6685 Metarhizium anisopliae sensu lato
5699 Isaria farinosa	6190 Purpureocillium lilacinum	6686 Beauveria bassiana
5729 Candida sp.	6213 Beauveria brongniartii	6689 Beauveria bassiana
5740 Beauveria bassiana	6214 Beauveria brongniartii	6692 Beauveria bassiana
5741 Beauveria bassiana	6215 Beauveria brongniartii	6693 Beauveria bassiana
5742 Beauveria bassiana	6216 Beauveria bassiana	6695 Beauveria bassiana
5743 Beauveria bassiana	6217 Beauveria bassiana	6696 Beauveria bassiana
5744 Beauveria bassiana	6229 Beauveria pseudobassiana	6697 Beauveria bassiana
5745 Beauveria bassiana	6235 Beauveria brongniartii	6721 Beauveria bassiana
5754 Isaria farinosa	6241 Isaria catenianulata	6730 Isaria fumosorosea
5764 Paraisaria dubia	6243 Isaria catenianulata	6827 Beauveria amorpho(?)
5807 Beauveria bassiana	6244 Isaria cateniobliqua	6884 Beauveria bassiana
5810 Batko sp.	6387 Beauveria bassiana	6885 Beauveria bassiana
5813 Beauveria bassiana	6388 Metarhizium anisopliae sensu lato	6890 Beauveria bassiana(?)
5831 Beauveria sp.	6389 Metarhizium anisopliae sensu lato	6891 Beauveria bassiana(?)
5833 Beauveria sp.	6390 Beauveria bassiana	6900 Beauveria bassiana
5834 Isaria farinosa	6391 Beauveria bassiana	6901 Metarhizium anisopliae sensu lato
5836 Beauveria bassiana	6392 Metarhizium brunneum	6903 Beauveria bassiana
5837 Metarhizium anisopliae sensu lato	6393 Beauveria bassiana	6986 Beauveria bassiana
5838 Beauveria bassiana	6412 Beauveria brongniartii	6987 Beauveria bassiana
5839 Beauveria bassiana	6454 Aspergillus flavus	6988 Beauveria bassiana
5840 Beauveria bassiana	6469 Aspergillus flavus	7000 Metarhizium anisopliae sensu lato
5841 Metarhizium anisopliae sensu lato	6470 Mucor circinelloides	7001 Metarhizium anisopliae sensu lato
5842 Metarhizium anisopliae sensu lato	6471 Beauveria bassiana	7002 Metarhizium anisopliae sensu lato
5843 Beauveria bassiana	6472 Metarhizium robertsii	7003 Metarhizium anisopliae sensu lato
5844 Isaria fumosorosea	6477 Metarhizium brunneum	7004 Metarhizium anisopliae sensu lato
5845 Isaria fumosorosea	6478 Beauveria bassiana	7005 Metarhizium anisopliae sensu lato
5846 Isaria fumosorosea	6483 Beauveria bassiana	7006 Metarhizium anisopliae sensu lato
5847 Isaria fumosorosea	6484 Verticillium sp.	7007 Metarhizium anisopliae sensu lato
5848 Metarhizium anisopliae sensu lato	6486 Verticillium sp.	7008 Metarhizium anisopliae sensu lato
5849 Verticillium lecanii	6487 Verticillium lecanii	7009 Metarhizium anisopliae sensu lato
5850 Metarhizium anisopliae sensu lato	6488 Isaria farinosa	7048 Aspergillus sp.
5856 Verticillium lecanii	6489 Isaria farinosa	7063 Fusarium sp.
5857 Beauveria bassiana	6491 Isaria farinosa	7119 Isaria javanica
5858 Isaria farinosa	6499 Beauveria bassiana	7152 Beauveria bassiana
5875 Fusarium sp.	6501 Verticillium sp.	7153 Beauveria bassiana
5876 Purpureocillium lilacinum	6515 Aspergillus nidulans(?)	7154 Beauveria bassiana
5877 Purpureocillium lilacinum	6516 Cladosporium sphaerospermum	7155 Beauveria bassiana
5878 Fusarium sp.	6526 Beauveria bassiana	7156 Beauveria bassiana
5879 Fusarium sp.	6527 Beauveria bassiana	7157 Beauveria bassiana
5880 Purpureocillium lilacinum	6528 Beauveria bassiana	7158 Beauveria bassiana
5882 Purpureocillium lilacinum	6529 Beauveria bassiana	7159 Beauveria bassiana
5979 Beauveria bassiana	6530 Beauveria bassiana	7160 Beauveria bassiana
5981 Beauveria bassiana	6531 Beauveria bassiana	7161 Beauveria bassiana
5982 Beauveria bassiana	6532 Beauveria bassiana	7162 Beauveria bassiana
5983 Beauveria bassiana	6545 Verticillium lecanii	7163 Beauveria bassiana
5984 Beauveria bassiana	6546 Metarhizium anisopliae sensu stricto	7164 Beauveria bassiana
5986 Beauveria bassiana	6549 Metarhizium anisopliae sensu lato	7165 Beauveria bassiana
5997 Beauveria bassiana	6551 Metarhizium anisopliae sensu lato	7166 Beauveria bassiana
6055 Beauveria bassiana	6552 Beauveria bassiana	7167 Beauveria bassiana
6057 Beauveria bassiana	6559 Beauveria bassiana	7168 Beauveria bassiana
6058 Beauveria bassiana	6560 Beauveria bassiana	7169 Beauveria bassiana
6059 Beauveria bassiana	6571 Aspergillus sp.	7170 Beauveria bassiana
6061 Beauveria bassiana	6602 Fusarium sp.	7171 Beauveria bassiana
6062 Beauveria bassiana	6669 Beauveria bassiana	7172 Beauveria bassiana
6063 Beauveria bassiana	6670 Metarhizium anisopliae sensu lato	7173 Beauveria bassiana
6064 Beauveria bassiana	6671 Metarhizium anisopliae sensu lato	7174 Beauveria bassiana
6074 Beauveria bassiana	6672 Metarhizium anisopliae sensu lato	7175 Beauveria bassiana
6075 Beauveria bassiana	6673 Metarhizium anisopliae sensu lato	7176 Beauveria bassiana
6077 Beauveria bassiana	6674 Metarhizium anisopliae sensu lato	7177 Beauveria bassiana
6078 Beauveria bassiana	6675 Metarhizium anisopliae sensu lato	7178 Beauveria bassiana
6092 Beauveria bassiana	6676 Beauveria bassiana	7179 Beauveria bassiana
6095 Beauveria bassiana	6677 Metarhizium anisopliae sensu lato	7180 Metarhizium anisopliae sensu lato
6096 Beauveria bassiana	6678 Metarhizium anisopliae sensu lato	7181 Lecanicillium lecanii
6099 Beauveria bassiana	6679 Metarhizium anisopliae sensu lato	7182 Lecanicillium lecanii
6110 Purpureocillium lilacinum	6680 Metarhizium anisopliae sensu lato	7202 Beauveria bassiana
6111 Beauveria bassiana	6681 Beauveria bassiana	7218 Evlachovaea kintrischchica
6112 Beauveria bassiana	6682 Metarhizium anisopliae sensu lato	7234 Metarhizium brunneum

7241	<i>Beauveria bassiana</i>	7769	<i>Beauveria bassiana</i>	8119	<i>Beauveria</i> sp.
7244	<i>Beauveria bassiana</i>	7773	<i>Beauveria bassiana</i>	8120	<i>Beauveria</i> sp.
7247	<i>Beauveria bassiana</i>	7774	<i>Beauveria bassiana</i>	8121	<i>Beauveria</i> sp.
7248	<i>Lecanicillium muscarium</i>	7795	<i>Beauveria bassiana</i>	8122	<i>Beauveria</i> sp.
7251	<i>Beauveria bassiana</i>	7805	<i>Engyodontium rectidentatum</i>	8123	<i>Beauveria</i> sp.
7261	<i>Beauveria bassiana</i>	7812	<i>Tolypocladium cylindrospororum</i>	8124	<i>Beauveria</i> sp.
7264	<i>Beauveria bassiana</i>	7813	<i>Beauveria bassiana</i>	8125	<i>Beauveria</i> sp.
7266	<i>Beauveria bassiana</i>	7814	<i>Metarhizium anisopliae</i> sensu lato	8126	<i>Beauveria</i> sp.
7268	<i>Beauveria brongniartii</i>	7815	<i>Metarhizium anisopliae</i> sensu lato	8127	<i>Beauveria</i> sp.
7270	<i>Beauveria bassiana</i>	7816	<i>Metarhizium anisopliae</i> sensu lato	8128	<i>Beauveria</i> sp.
7271	<i>Beauveria bassiana</i>	7819	<i>Metarhizium anisopliae</i> sensu lato	8129	<i>Beauveria</i> sp.
7272	<i>Beauveria bassiana</i>	7824	<i>Metarhizium anisopliae</i> sensu lato	8130	<i>Beauveria</i> sp.
7275	<i>Beauveria bassiana</i>	7825	<i>Metarhizium anisopliae</i> sensu lato	8131	<i>Fusarium</i> sp.
7276	<i>Isaria farinosa</i>	7826	<i>Metarhizium anisopliae</i> sensu lato	8132	<i>Beauveria</i> sp.
7277	<i>Cordyceps scarabaeicola</i>	7827	<i>Metarhizium anisopliae</i> sensu lato	8133	<i>Beauveria</i> sp.
7278	<i>Cordyceps scarabaeicola</i>	7828	<i>Metarhizium anisopliae</i> sensu lato	8134	<i>Beauveria</i> sp.
7279	<i>Beauveria sungii</i>	7829	<i>Metarhizium anisopliae</i> sensu lato	8135	<i>Beauveria</i> sp.
7280	<i>Beauveria sungii</i>	7830	<i>Metarhizium anisopliae</i> sensu lato	8136	<i>Beauveria</i> sp.
7282	<i>Acremonium alternatum</i>	7831	<i>Metarhizium anisopliae</i> sensu lato	8137	<i>Beauveria</i> sp.
7284	<i>Isaria fumosorosea</i>	7832	<i>Metarhizium anisopliae</i> sensu lato	8138	<i>Beauveria</i> sp.
7403	<i>Evlachovaea</i> sp.	7839	<i>Metarhizium anisopliae</i> sensu lato	8139	<i>Beauveria</i> sp.
7404	<i>Beauveria bassiana</i>	7842	<i>Metarhizium anisopliae</i> sensu lato	8140	<i>Beauveria</i> sp.
7410	<i>Metarhizium pingshaense</i>	7843	<i>Metarhizium anisopliae</i> sensu lato	8141	<i>Beauveria</i> sp.
7411	<i>Metarhizium anisopliae</i> sensu lato	7844	<i>Metarhizium anisopliae</i> sensu lato	8142	<i>Isaria fumosorosea</i>
7412	<i>Metarhizium lepidiotae</i>	7845	<i>Metarhizium anisopliae</i> sensu lato	8143	<i>Beauveria</i> sp.
7417	<i>Metarhizium pingshaense</i>	7846	<i>Metarhizium anisopliae</i> sensu lato	8144	<i>Beauveria</i> sp.
7424	<i>Metarhizium robertsii</i>	7848	<i>Cordyceps</i> sp.	8145	<i>Beauveria</i> sp.
7435	<i>Metarhizium pingshaense</i>	7853	<i>Beauveria bassiana</i>	8146	<i>Beauveria</i> sp.
7449	<i>Metarhizium robertsii</i>	7854	<i>Metarhizium anisopliae</i> sensu lato	8147	<i>Beauveria</i> sp.
7450	<i>Metarhizium anisopliae</i> sensu stricto	7863	<i>Metarhizium anisopliae</i> sensu lato	8148	<i>Beauveria</i> sp.
7451	<i>Metarhizium anisopliae</i> sensu lato	7864	<i>Metarhizium anisopliae</i> sensu lato	8149	<i>Beauveria</i> sp.
7452	<i>Metarhizium anisopliae</i> sensu lato	7865	<i>Metarhizium anisopliae</i> sensu lato	8150	<i>Beauveria</i> sp.
7453	<i>Metarhizium anisopliae</i> var. <i>lepidotae</i>	7931	<i>Metarhizium anisopliae</i> sensu lato	8151	<i>Beauveria</i> sp.
7456	<i>Tolypocladium cylindrospororum</i>	7932	<i>Metarhizium anisopliae</i> sensu lato	8152	<i>Beauveria</i> sp.
7463	<i>Beauveria</i> sp.	7933	<i>Metarhizium anisopliae</i> sensu lato	8153	<i>Beauveria</i> sp.
7466	<i>Beauveria bassiana</i>	7934	<i>Metarhizium anisopliae</i> sensu lato	8154	<i>Beauveria</i> sp.
7470	<i>Beauveria bassiana</i>	7935	<i>Metarhizium anisopliae</i> sensu lato	8155	Unidentified / <i>Hyphomycetes</i>
7471	<i>Beauveria bassiana</i>	7936	<i>Metarhizium anisopliae</i> sensu lato	8156	<i>Beauveria</i> sp.
7488	<i>Metarhizium lepidiotae</i>	7941	<i>Beauveria bassiana</i>	8157	<i>Lecanicillium muscarium</i>
7492	<i>Metarhizium anisopliae</i> sensu lato	7972	<i>Beauveria bassiana</i>	8158	<i>Beauveria</i> sp.
7493	<i>Metarhizium</i> sp.	7978	<i>Beauveria bassiana</i>	8159	<i>Beauveria</i> sp.
7494	<i>Metarhizium anisopliae</i> sensu lato	8024	<i>Beauveria caledonica</i>	8160	<i>Beauveria</i> sp.
7495	<i>Metarhizium</i> sp.	8037	<i>Beauveria bassiana</i>	8161	<i>Beauveria</i> sp.
7496	<i>Metarhizium anisopliae</i> sensu lato	8038	<i>Beauveria bassiana</i>	8162	<i>Lecanicillium muscarium</i> (?)
7498	<i>Metarhizium anisopliae</i> sensu lato	8048	<i>Lecanicillium muscarium</i>	8163	<i>Lecanicillium muscarium</i>
7499	<i>Metarhizium anisopliae</i> sensu lato	8049	<i>Lecanicillium muscarium</i>	8164	<i>Beauveria</i> sp.
7500	<i>Metarhizium anisopliae</i> sensu lato	8050	<i>Lecanicillium muscarium</i>	8165	<i>Lecanicillium muscarium</i>
7504	<i>Metarhizium anisopliae</i> sensu lato	8051	<i>Lecanicillium muscarium</i>	8166	<i>Beauveria</i> sp.
7505	<i>Metarhizium majus</i>	8052	<i>Lecanicillium muscarium</i>	8167	<i>Beauveria</i> sp.
7516	<i>Cordyceps brongniartii</i>	8053	<i>Lecanicillium muscarium</i>	8168	<i>Beauveria</i> sp.
7517	<i>Cordyceps brongniartii</i>	8054	<i>Lecanicillium muscarium</i>	8169	<i>Beauveria</i> sp.
7524	<i>Metarhizium anisopliae</i> sensu lato	8055	<i>Lecanicillium pissodis</i>	8170	<i>Beauveria</i> sp.
7525	<i>Beauveria bassiana</i>	8056	<i>Lecanicillium pissodis</i>	8171	<i>Beauveria</i> sp.
7526	<i>Beauveria bassiana</i>	8057	<i>Lecanicillium pissodis</i>	8172	<i>Beauveria</i> sp.
7527	<i>Metarhizium anisopliae</i> sensu lato	8058	<i>Evlachovaea kintrischica</i>	8173	<i>Beauveria</i> sp.
7528	<i>Beauveria brongniartii</i>	8065	<i>Beauveria bassiana</i>	8174	<i>Beauveria</i> sp.
7529	<i>Metarhizium anisopliae</i> sensu lato	8077	<i>Beauveria bassiana</i>	8175	<i>Beauveria</i> sp.
7532	<i>Metarhizium anisopliae</i> sensu lato	8078	<i>Beauveria bassiana</i>	8176	<i>Beauveria</i> sp.
7551	<i>Evlachovaea</i> sp.	8079	<i>Beauveria bassiana</i>	8177	<i>Beauveria</i> sp.
7580	<i>Beauveria</i> sp.	8098	<i>Metarhizium anisopliae</i> sensu lato	8178	<i>Beauveria</i> sp.
7581	<i>Beauveria bassiana</i>	8099	<i>Metarhizium anisopliae</i> sensu lato	8179	Unidentified / <i>Hyphomycetes</i>
7591	<i>Beauveria</i> sp.	8110	<i>Beauveria</i> sp.	8180	<i>Beauveria</i> sp.
7595	<i>Beauveria</i> sp.	8111	<i>Beauveria</i> sp.	8181	<i>Beauveria</i> sp.
7716	<i>Isaria fumosorosea</i>	8112	<i>Beauveria</i> sp.	8182	<i>Beauveria</i> sp.
7758	<i>Beauveria bassiana</i>	8113	<i>Beauveria</i> sp.	8183	Unidentified / <i>Hyphomycetes</i>
7760	<i>Beauveria malawiensis</i>	8114	<i>Lecanicillium muscarium</i>	8184	Unidentified / <i>Hyphomycetes</i>
7761	<i>Beauveria brongniartii</i>	8115	<i>Lecanicillium lecanii</i>	8185	<i>Beauveria</i> sp.
7763	<i>Beauveria bassiana</i>	8116	<i>Beauveria</i> sp.	8186	<i>Beauveria</i> sp.
7764	<i>Beauveria bassiana</i>	8117	<i>Beauveria</i> sp.	8187	<i>Beauveria</i> sp.
		8118	<i>Lecanicillium muscarium</i>	8188	<i>Beauveria</i> sp.

8910	Metarhizium anisopliae sensu lato	9502	Sporothrix insectorum
8911	Metarhizium anisopliae sensu lato	9509	Isaria coleopterorum
8912	Metarhizium anisopliae sensu lato	9511	Isaria farinosa
8913	Metarhizium anisopliae sensu lato	9516	Isaria farinosa
8914	Metarhizium anisopliae sensu lato	9519	Isaria sp.
8915	Metarhizium anisopliae sensu lato	9521	Isaria fumosorosea
8916	Metarhizium anisopliae sensu lato	9524	Purpureocillium lilacinum
8917	Isaria farinosa	9602	Isaria fumosorosea
8918	Purpureocillium lilacinum	9944	Isaria farinosa
8919	Purpureocillium lilacinum	9945	Isaria farinosa
8920	Purpureocillium lilacinum	10132	Tilachlidium sp.
8921	Purpureocillium lilacinum	10347	Beauveria bassiana
8922	Purpureocillium lilacinum	10350	Beauveria bassiana
8923	Lecanicillium muscarium	10469	Metarhizium anisopliae sensu lato
8941	Metarhizium anisopliae sensu lato	10471	Beauveria bassiana
8942	Metarhizium anisopliae sensu lato	10472	Metarhizium anisopliae sensu stricto
8943	Metarhizium anisopliae sensu lato	10475	Metarhizium anisopliae sensu stricto
8944	Metarhizium anisopliae sensu lato	10476	Metarhizium anisopliae sensu stricto
8945	Metarhizium anisopliae sensu lato		
8946	Metarhizium anisopliae sensu lato		
8947	Metarhizium anisopliae sensu lato		
8948	Metarhizium anisopliae sensu lato		
8949	Metarhizium anisopliae sensu lato		
8950	Metarhizium anisopliae sensu lato		
8951	Metarhizium anisopliae sensu lato		
8952	Metarhizium anisopliae sensu lato		
8953	Metarhizium anisopliae sensu lato		
8954	Metarhizium anisopliae sensu lato		
8955	Metarhizium anisopliae sensu lato		
8998	Beauveria bassiana		
9184	Beauveria bassiana		
9217	Metarhizium anisopliae sensu lato		
9218	Metarhizium anisopliae sensu lato		
9235	Metarhizium anisopliae sensu lato		
9236	Metarhizium anisopliae sensu lato		
9267	Lecanicillium muscarium		
9268	Lecanicillium muscarium		
9269	Isaria farinosa		
9270	Isaria farinosa		
9271	Beauveria bassiana(?)		
9272	Beauveria sp.		
9273	Fusarium sp.		
9274	Fusarium sp.		
9275	Isaria farinosa		
9276	Isaria farinosa		
9277	Isaria farinosa		
9278	Isaria farinosa		
9297	Beauveria bassiana		
9298	Beauveria bassiana		
9299	Beauveria bassiana		
9300	Beauveria bassiana		
9301	Beauveria bassiana		
9302	Beauveria bassiana		
9371	Purpureocillium lilacinum		
9372	Metarhizium anisopliae sensu lato		
9373	Metarhizium anisopliae sensu lato		
9374	Metarhizium anisopliae sensu lato		
9381	Aspergillus flavus		
9441	Beauveria bassiana		
9442	Beauveria bassiana		
9444	Beauveria bassiana		
9449	Beauveria bassiana		
9452	Beauveria brongniartii		
9459	Lecanicillium sp.		
9460	Lecanicillium nr. aranearium		
9479	Simplicillium lamellicola		
9483	Lecanicillium fungicola		
9491	Clonostachys rosea		
9496	Polycephalomyces sp.		
9497	Polycephalomyces sp.		